भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सडक परिवहन और राजमार्ग मंत्रालय, भारत सरकार)
National Highways Authority of India
(Ministry of Road Transport and Highways, Government of India)
श्रेत्रीय कार्यालय : 41-29-45A, सर्वे नं: 373/2A, कोदंडरामालयम्,चलसानी नगर,
रानीगारीतोटा, कृष्णालंका, विजयावाडा - 520 013, आन्ध्र प्रदेश
Regional Office: D.No. 41-29-45A, RS.No. : 373/2A, Kodandaramalayam, Chalasani Nagar,
Ranigari Thota, Krishna Lanka, Vijayawada - 520 013, Andhra Pradesh.
फोन / Tel : 0866-2483910, ई-मैल/e-mail: rovijayawada@nhai.org, nhairovja@gmail.com
वेब/ web: www.nhai.gov.in

No: NHAI/RO-VJA/KDP/NH-40 Crossing/2023/4422 Dt.14.12.2023

INVITATION OF PUBLIC COMMENTS

Sub: RO - Vijayawada - Design Engineering, Financing, Procurement, Construction, Operation & Maintenance of 4 laning of Cuddapah - Kurnool section of NH-18 from the existing Km.167.750 to Km.256.502 in the State of Andhra Pradesh under Phase-III on BOT basis - **Proposal for Crossing of 400 KV double circuit twin moose transmission line from Kodumur PSS to Central Pooling Switching station at Km.328.253 i.e., between the KM stones 328.250 to 328.400 from LHS to RHS of NH - 40 near Hussainapuram village, Orvakal Mandal in Kurnool District - Public comments** - Reg.

Please find enclosed herewith a proposal submitted by M/s. AM Green Energy Pvt. Ltd., for according permission for Crossing of 400 KV double circuit twin moose transmission line from Kodumur PSS to Central Pooling Switching station at Km.328.253 i.e., between the KM stones 328.250 to 328.400 from LHS to RHS of NH - 40 near Hussainapuram village, Orvakal Mandal in Kurnool District.

2. As per MORTH guidelines vide letter No. RW/NH-33044/29/2015/S&R dated 22nd November 2016, the Highway Administration will put out the application in the Ministry's website for 30 days seeking claims and objections (on grounds of public inconvenience, safety and general public interest).

In view of the above, the comments of public, if any, on the above mentioned proposal is invited on below mentioned address.

Regional Officer - Vijayawada,
National Highways Authority of India,
Regional Office, Dr. No.41-29-45A, R. S. No.373/2A
Near Kodandaramalayam, Chalasani Nagar,
Ranigarithota, Krishnalanka, Vijayawada - 520 013.
Email: rovijayawada@nhai.org

(R.K. Singh),
Regional Officer
RO - Vijayawada

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सडक परिवहन और राजमार्ग मंत्रालय, भारत सरकार)
National Highways Authority of India
(Ministry of Road Transport and Highways, Government of India)
श्रेत्रीय कार्यालय : 41-29-45A, सर्वे नं: 373/2A, कोदंडरामालयम्,चलसानी नगर,
रानीगारीतोटा, कृष्णालंका, विजयावाडा - 520 013, आन्ध्र प्रदेश
Regional Office: D.No. 41-29-45A, RS.No. : 373/2A, Kodandaramalayam, Chalasani Nagar,
Ranigari Thota, Krishna Lanka, Vijayawada - 520 013, Andhra Pradesh.
फोन / Tel : 0866-2483910, ई-मैल/e-mail: rovijayawada@nhai.org, nhairovja@gmail.com
वेब/ web: www.nhai.gov.in

No: NHAI/RO-VJA/KDP/NH-40 Crossing/2023/ 4420 Dt.14.12.2023

To

The Sr. Technical Director,
NIC, Transport Bhawan,
New Delhi- 110001.

Sub: RO - Vijayawada - Design Engineering, Financing, Procurement, Construction, Operation & Maintenance of 4 laning of Cuddapah - Kurnool section of NH-18 from the existing Km.167.750 to Km.256.502 in the State of Andhra Pradesh under Phase-III on BOT basis - **Proposal for Crossing of 400 KV double circuit twin moose transmission line from Kodumur PSS to Central Pooling Switching station at Km.328.253 i.e., between the KM stones 328.250 to 328.400 from LHS to RHS of NH - 40 near Hussainapuram village, Orvakal Mandal in Kurnool District - Public comments** - Reg.

Sir,

Please find enclosed herewith a proposal submitted by M/s. AM Green Energy Pvt. Ltd., for according permission for Crossing of 400 KV double circuit twin moose transmission line from Kodumur PSS to Central Pooling Switching station at Km.328.253 i.e., between the KM stones 328.250 to 328.400 from LHS to RHS of NH - 40 near Hussainapuram village, Orvakal Mandal in Kurnool District.

2. As per MORTH guidelines vide letter No. RW/NH-33044/29/2015/S&R dated 22nd November 2016, the application along with the recommendations of PD, PIU - Kadapa are enclosed herewith with a request to host the same in the Ministry's website for 30 days seeking claims and objections (on grounds of public inconvenience, safety and general public interest), for taking further necessary action.

Yours faithfully,

Encl: As above

(R.K. Singh),
Regional Officer
RO - Vijayawada

Copy to:

(i) PD, PIU - Kadapa
(ii) The Sr. General Manager, M/s. AM Green Energy Pvt. Ltd., Hyderabad - for information.

सत्यमेव जयते

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)
National Highways Authority of India
(Ministry of Road Transport & Highways, Government of India)
परियोजना कार्यान्वयन, इकाई, #1/441/16, लक्ष्मी टावर्स के पीछे,
नए आर.टी.सी बस स्टैंड के पास, **कड़पा** – 516 001, वाई.एस.आर जिला, आंध्र प्रदेश
Project Implementation Unit, #1/441/16, Behind Lakshmi Towers, Maruthi Nagar,
Near RTC Bus Stand, **KADAPA** – 516 001, YSR District, Andhra Pradesh.
ई-मैल/e-mail: piukadapa@nhai.org, kadapanhai@gmail.com; **वेब**/web: www.nhai.gov.in

NHAI/PIU-KDP/13006/1/2023/NH-40/Access Permission/13911 **Date 24.11.2023**

To

The Regional Officer,
National Highways Authority of India,
Door No.41-29-45A, R.S.No.373/2A,
Near Kodandaramalayam, Chalasani Nagar,
Ranigarithota, Krishnalanka,
VIJAYAWADA - 520 013

Sub: **NHAI, PIU-Kadapa** - Design Engineering, Financing, Procurement, Construction, Operation & Maintenance of 4 laning of Cuddapah-Kurnool section of NH-18 from the existing Km.167.750 to Km.356.502 in the State of A.P. under NHDP Phase-III on BOT Basis - Proposal for approval of NH-40 crossing of 400KV double circuit twin moose transmission line from Kodumur PSS to Central Pooling switching station at Km. 328.253 i.e., between the KM stones 328.250 to 328.400 from LHS to RHS of NH-40 near Hussainapuram Village, OrvakalMandal, Kurnool District - **Request for approval - Reg.**

Ref:
(i) Concessionaire M/s REPL-NandyalLr. No.REPL/O&M/NHAI/2023/113 dtd.18.10.2023
(ii) IE M/s.LN Malviya Infra Projects Pvt. Ltd., Nandyal Letter No.LNM/IE/PCK-40/KK-07/2023/417 dtd.11.10.2023
(iii) T/o. Letter No. NHAI/PIU-KDP/13006/1/2023/NH-40/Access Permission/13578 dtd.07.10.2023
(iv) Online application no. 20231007/2/15/20617/3718 dtd.07.10.2023 of M/s. AM Green Energy Pvt. Ltd., submitted by M/s. Anya Infrastructures, Anantapuramu
(v) M/s AM Green Energy Pvt. Ltd., letter no & dated nil received on 07.10.2023

Sir,

This has reference to the letter under reference **(v)** cited above vide which M/s. AM Green Energy Pvt. Ltd., has submitted the proposal for approval of NH-40 crossing of 400KV double circuit twin moose transmission line from Kodumur PSS to Central Pooling switching station at Km.328.253 i.e., between the KM stones 328.250 to Km.328.400 from LHS to RHS of NH-40 near Hussainapuram Village, OrvakalMandal, Kurnool District. The same was also received through online module vide reference **(iv)** cited above.

2. The said proposal was referred to the Independent Engineer and the Concessionaire of the project for furnishing their comments / recommendations.

3. The Independent Engineer and the Concessionaire vide letters under reference (i) & (ii) cited above has submitted the recommendation of the said proposal duly informing the following;

3.1. Laying of Transmission Line should not affect the progress of present and future works in the project.

Contd....2

3.2. The proposed Transmission Lines should be laid as per the drawing / sketch enclosed and as per the MoRT&H guidelines. Minimum vertical clearance from the Road Top level to bottom point of the lowest conductor should be 18.6m (in all seasons) as specified in the application.

3.3. The applicant / executing agency has to provide all the necessary safety arrangements and traffic management as per IRC: SP: 55-2014 during execution.

3.4. Prior information has to be given to NHAI, Concessionaire and IE regarding the start of the work.

3.5. There is no objection to the Concessionaire provided that Authority grants access permission.

4. As per the recommendation of the Independent Engineer and the Concessionaire, the proposal has been verified in this office and following are submitted:

4.1. The tower line is crossing the Main Carriageway from Km.328.250 to Km.328.400 from LHS to RHS of NH-18 (New NH-40) near Hussainapuram Village.

4.2. The available RoW is 30m from center line for both sides. M/s. AM Green Energy Private Limited, Hyderabad has proposed to lay the utility line is 107m from the centre line at LHS and 138m from the center line at RHS.

4.3. Sh. KrishnenduRoychowdhury, Sr. General Manager, Hyderabad on behalf of M/s. AM Green Energy Private Limited, Hyderabad has submitted the following;

4.3.1. Undertaking for pay or compensate for any damages caused to the NHAI property.
4.3.2. Undertaking to ensure compliance of all safety norms during stringing work.
4.3.3. Undertaking to ensure the traffic movement during stringing work.
4.3.4. Undertaking to relocate the transmission lines at their own cost during the 6-laning or further development works of Kadapa - Kurnool section of NH-40.
4.3.5. Indemnity against all damages and claims.
4.3.6. All necessary undertakings.

4.3.7. A Certificate stating that;

a) Laying of utility line will not have any deleterious effects on any of the bridge components and roadway safety for traffic.

b) Relocate service road / approach road / Utilities at their own cost not-withstanding the permission granted within such time as stipulated by NHAI for future six laning or any other development.

4.3.8. Methodology of carrying out the stringing.

Contd....3

4.3.9. Strip plan showing the crossing of 400KV double circuit twin moose transmission line from Kodumur PSS to Central Pooling switching station at Km.328.253 i.e., between the KM stones 328.250 to Km.328.400 from LHS to RHS of NH-40 near Hussainapuram Village, OrvakalMandal, Kurnool District.

4.3.10. Drawings / Sketch for the said crossing.

4.3.11. Draft Agreement for laying of utility services.

4.3.12. Checklist for getting approval for laying of utility services.

5. In view of the above, it is recommended that necessary approval may please be accorded to M/s. AM Green Energy Pvt. Ltd., for crossing of 400KV double circuit twin moose transmission line from Kodumur PSS to Central Pooling switching station at Km.328.253 i.e., between the KM stones 328.250 to 328.400 from LHS to RHS of NH-40 near Hussainapuram Village, OrvakalMandal, Kurnool District.

Yours Sincerely,

Encl: As above

(Neeraj Gupta)
DGM (Tech.) & Project Director

CERTIFICATE

1. Undersigned has examined the proposal of the applicant for crossing of 400KV double circuit twin moose transmission line from Kodumur PSS to Central Pooling switching station at Km.328.253 i.e., between the Km.328.250 to Km.328.400 from LHS to RHS near Hussainapuram(V), Orvakal(M), Kurnool District on Kadapa - Kurnool section of NH-40 and confirm that all the standard conditions issued vide Ministry Circular No. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016 and MoRT&H guidelines no. NH-36094/01/2022-S&R (P&B) (E-208825) dated 24.04.2023 has been followed.

2. It is certified that the proposed crossing of overhead HT line will not adversely affect the design, stability and traffic safety of the Highway nor the likely future improvement such as widening of the carriageway, easing of curve, etc., as the overhead HT transmission line crossing is proposed at 107m (LHS) and 138m (RHS) from the RoW.

3. The Independent Engineer M/s. LN Malviya Infra Projects Pvt. Ltd., in association with Highway Engineering Consultants of the project verified at site and has recommended the proposal vide letter no. LNM/IE/PCK-40/KK-07/2023/417 date 11.10.2023.

4. The Concessionaire of the Project M/s.Rayalseema Expressway Pvt. Ltd., has given the consent letter no. REPL/O&M/NHAI/2023/113 dated 18.10.2023.

5. It is certified that, till date there is no proposal for 6-laning of the said stretch.

6. It will be ensured through the Independent Engineer for the project for supervision of the work of HT line crossing and ensure that the defects in road portion after laying of utility are corrected.

7. The proposed permission will be entered in the Register of Records.

8. No approvals are accorded for HT line crossing.

(Neeraj Gupta
DGM (Tech.) & Project Director

From
Krishnendu Roychowdhury
Sr. General Manager
Transmission & Regulatory
M/s AM Green Energy Pvt Ltd.
MYHOME TWITZA, 5th Floor,
Plot No. 30/A, Survey No. 83/1,
APIIC Knowledge City of Raidurg,
Rangareddy Dist. Hyderabad-500081
Telengana

To
Project Director
Project Implementation Unit
National Highways Authority of India
Kadapa

Sub: Proposed National Highway-40 crossing of 400KV double circuit twin moose transmission line from Kodumur PSS to Central Pooling switching station at Km 328.253 i.e., between the KM stones 328.250 to 328.400 from LHS to RHS of NH-40 near Hussainapuram village, Oravkal Mandal in Kurnool Dt., Andhra Pradesh. - Approval for NH crossing - Requested - Regarding.

Please find the following documents enclosed here with for your kind perusal in respected to the approval of crossing NH-40 for above subjected line.

1. Check list of documents & crossing details.
2. An undertaking of indemnifying NHAI for any damages caused due to proposed stringing.
3. Common undertaking to ensure compliance of all safety norms during stringing work.
4. An undertaking to ensure compliance of all safety norms during stringing
5. An undertaking regarding traffic movement.
6. An undertaking that relocation of towers during further modification of NH.
7. 400KV double circuit twin moose transmission (S/C strung on D/C Towers) line from 400/33KV Alamuru PSS to Central Pooling substation Near Somayajulu palli Village, Oravkal Mandal in Kurnool District NH-40 crossing point profile.

The above documents being submitted seeking approval for crossing of above subjected line at NH-40 at Km 328.253 i.e., between the KM stones 328.250 to 328.400. Kindly process our application at the earliest for approval of NH-40 crossing by 400KV double circuit twin moose transmission line from Kodumur PSS to Central Pooling switching station Near Hussainapuram Village, Orvakal Mandal in Kurnool District.

Thanking you sir.

Yours faithfully,

NHAI - PIU, KADAPA	
Date 07.10.23	No. 17754
Manager	SE
Dy.Manager	AC
LAO	ITE
PA / Steno	Y.H.E.

Krishnendu Roychowdhury
Sr. General Manager
Transmission & Regulatory
M/s AM Green Energy Pvt Ltd.

AM GREEN ENERGY PVT. LTD. HYDERABAD

CHECK LIST

Guidelines for processing the proposal for Providing 400KV double circuit twin moose transmission line from Kodumur PSS to Central Pooling switching station at Km. 328.253 i.e., between the KM stones 328.250 to 328.400 from LHS to RHS of NH-40 Near Hussainapuram Village, Orvakal Mandal in Kurnool District

Sl. No	Item	Information /Status	IE comments
1	**General Information**		
1.1	Name and address of the Applicant/ Agency	Krishnendu Roychowdhury, Sr. General Manager - Transmission & Regulatory, M/s AM Green Energy Pvt Ltd, MY HOME TWITZA, 5th Floor, Plot No. 30/A, Survey No. 83/1, APIIC Knowledge City of Raidurg, Rangareddy Dist. Hyderabad-500081	Krishnendu Roychowdhury, Sr. General Manager - Transmission & Regulatory, M/s AM Green Energy Pvt Ltd, MY HOME TWITZA, 5th Floor, Plot No. 30/A, Survey No. 83/1, APIIC Knowledge City of Raidurg, Rangareddy Dist. Hyderabad-500081
1.2	National Highway Number	NH-40	NH-40
1.3	State	Andhra Pradesh	Andhra Pradesh
1.4	Location	Near Hussainapuram village, Orvakal Mandal, Kurnool District	Near Hussainapuram village, Orvakal Mandal, Kurnool District
1.5	Chainage/Km	NH-40 road at Km 328.253 i.e., between the KM stones 328.250 to 328.400 from LHS to RHS	NH-40 road at Km 328.253 i.e., between the KM stones 328.250 to 328.400 from LHS to RHS
1.6	Length in meters	–	46 mts (ROW of the utility crossing at 90° to the Project alignment)
1.7	Width of available Row		
	a) Left side from centre line towards increasing chainage /Km direction	30 mts	30 mts
	b) Right side from centre line towards increasing chainage /km direction	30 mts	30 mts
1.8	Proposal to lay the Overhead HT Transmission line		
	a) Left side from centre line towards increasing chainage /Km direction	107 mts	107 mts
	b) Right side from centre line towards increasing chainage /km direction	138 mts	138 mts
	c) Angle of crossing	79°	79°
1.9	Proposal to acquire the land		
	a) Left side from centre line	NA	NA
	b) Right side from centre line	NA	NA
1.10	Whether proposal is in the same side where land is not to be acquired. If not then where to lay the HT line	Not Applicable, as the proposal is for crossing of NH only.	Not Applicable, as the proposal is for crossing of NH only.
1.11	Details of already laid services, if any along the proposed route	Nil	Nil
1.12	Number of existing lanes (2/4/6/8 lanes) existing	4 lane	4 lane
1.13	Proposed Number of lane (2 lane with paved shoulders /4/6/8 lanes)	NA	NA
1.14	Service road existing or not.	NA	There is no provision of service road at this location
	If yes then which side		
	a) Left side from centre line		
	b) Right side from centre line		
1.15	Proposed service road	NA	NA
	a) Left side from centre line		
	b) Right side from centre line		

Krishnendu Roychowdhury

AM GREEN ENERGY PVT LTD. HYDERABAD

RAYALASEEMA EXPRESS WAY PVT LTD

L.N. MALVIYA INFRA PROJECTS PVT. LTD. Association with Highway Engineering NH-40

PROJECT DIRECTOR
NHAI, P.I.U. KADAPA.

Kailash
Dy. Manager (T)
NHAI, P.I.U. KADAPA

Sl. No	Item	Information /Status	IE comments
1.16	Whether proposal to lay Overhead HT Transmission line is after the service road in between the service road and main carriage way	NA	NA
1.17	Whether carrying of utility line has been proposed on highway Bridges. If yes, then mention the methodology proposed for the same.	NA	NA
1.18	Whether carrying of utility line has been proposed on the parapet/any part of the bridges. If yes, then mention the methodology proposed for the same.	NA	NA
1.19	If crossings of the road involved	Yes	Yes
	If yes, it shall be either encased in pipes or through structure or conduits specially built for that purpose at the expanses of the agency owning the line.	Crossing is involved as it is an EHT line	Crossing is involved as it is an EHT line
	a) Whether the existing drainage structures are allowed to carry the utility pipeline	NA	NA
	b) Is it on the line normal to NH	NA	NA
	c) Cossing shall not be too near the existing structures on the National Highways. The minimum distance being 15 mts. What is the distance from the existing structures.	NA	NA
	d) The casing pipe (or conduit pipw in the case of electric cable) carrying the utility line shall be of steel, cast iron or reinforced cement concrete and have adequate strength and be large enough to permit ready withdrawal of the carrier pipe/cable. Mention type of casing.	NA	NA
	e) Ends of the casing pipe shall be sealed from the outside, so that it does not act as a drainage path.	NA	NA
	f) The casing/conduit pipe should be as minimum extend from drain to drain in cuts and toe of the slope in the fills.	NA	NA
	g) The top of the casing/Conduit pipe should be at least 1.20m below the surface of the roads subject to being at least 0.30metr below, the drain inverts. Mention the proposed details.	NA	NA
	h) Mention the methodology proposed for crossing of road for the proposed utility line. Crossing shall be by boring method (HDD) (Trenchless Technology). Specially, where the existing road pavement is of cement concrete or dense bituminous concrete type.	NA	NA
	i) The casing/conduit pipe shall be installed with an even bearing throughout its length and in such a manner as to prevent the formation of a water way along it.	NA	NA

Krishnendu Bandopadhyay

AM GREEN ENERGY PVT LTD HYDERABAD

RAYALASEEMA EXPRESS WAY PVT LTD

L.N. MALVIYA INFRA PROJECTS PVT. LTD. In association with Highway Engineering Consultant NH-40 NANDYAL

PROJECT DIRECTOR
NHAI, P.I.U. KADAPA.

Kailash
Dy. Manager (T)
NHAI, P.I.U. KADAPA.

Sl. No	Item	Information /Status	IE comments
2	**Document/Drawings enclosed with the proposal**		
2.1	Cross section showing the size of the trench for open trenching method (Is it nominal size of 1.2m deep X 0.3m wide) **(i)** Should not be greater than 60cm wider than the outer diameter of the pipe. **(ii)** Located as close to the extreme edge of the right-of-way as possible but not less than 15 meters from the centre-lines of the nearest carriageway. **(iii)** Shall not be permitted to run along the National Highways when the road formation is situated in double cutting. Nor shall be laid over the existing culverts and bridges. **(iv)** These should be so laid that their top is at least 0.60 mts below the ground level so as not to obstruct drainage of the road land.	NA	NA
2.2	Cross section showing the size of the pit and location of cable for HDD method.	NA	NA
2.3	Strip plan/ route plan showing the utility line chainage, width of ROW, distance of proposed pipeline from the edge of ROW. Important milestone intersections, cross drainage works etc.	Yes Enclosed	Yes Enclosed
2.4	Methodology for laying over head HT Transmission line.	Yes Enclosed	Yes Enclosed
2.4.1	Open trenching method (May be allowed in utility corridor only where pavement is neither cement concrete nor dense bituminous concrete type. If yes, what is the Methodology of refilling of trench.		
	(a) The trench width should be at least 30cm, but not more than 60cm wider than the outer diameter of the pipe.	NA	NA
	(b) For filling of the trench bedding shall be to a depth of not less than 30cm. It shalt consists of granular material. Free of lumps, clodsand cobbles and graded to yield a firm surface in the bearing value. Unsuitable soil and rock edged should be excavated and replaced by selected material.	NA	NA
	(c) The backfill shall be completed in two stages **(i)** side - fill to the level of the top of the pipe and **(ii)** overfill to the bottom of the road crust.	NA	NA
	(d) The side fill shall consist of granular material laid in 15 cm layers each consolidated by mechanical tampering and controlled addition of moisture to 95% of the Proctor's Density. Overfill shall be compacted to the same density as the material that had been removed. Consolidation by saturation or pending will not be permitted.	NA	NA

AM GREEN ENERGY PVT LTD. HYDERABAD

L.N. MALVIYA INFRA PROJECTS PVT. LTD. NH-40 NANDYAL

PROJECT DIRECTOR
NHAI, P.I.U. KADAPA.

Dy. Manager (T)
NHAI, P.I.U. KADAPA.

Sl. No	Item	Information /Status	IE comments
	(e) The road crust shall be built to the same strength as existing crust on either side of the trench. Care shall be taken to avoid the formation of a dip at the trench.	NA	NA
	(f) The excavation shall be protected by flagman, signs and barricades, and red lights during night hours.	NA	NA
	(g) If required, a diversion shall be constructed at the expense of agency owning the utility line.	NA	NA
2.4.2	Horizontal Directional Drilling (HDD) method	NA	NA
2.4.3	Laying of HT Transmission line through CD works and method of laying.	NA	NA
3	Draft License Agreement signed by two witnesses	Enclosed	Enclosed
4	Whether Performance bank guarantee as per Ministry's guidelines issued vide Circular no.RW/NH-33044/29/2015/S&R(R) Dated.22.11.2016 is obtained.	NA	NA
4.1	Confirmation of BG has been obtained are not as per MORTH/ NHAI Guidelines	NA	NA
5	**Affidavit/ undertaking from the applicant for**		
5.1	Not to damage any other utility, if damaged then to pay the losses either to NHAI or to the concerned agency.	Yes Enclosed	Yes Enclosed
5.2	Confirming all standard condition of Ministry circulars and NHAI's Guidelines.	Yes Enclosed	Yes Enclosed
5.3	Shifting of Overhead HT line as and when required by NHAI at the cost of applicant.	Yes Enclosed	Yes Enclosed
5.4	Shifting due to 6 laning / widening of NH	Yes Enclosed	Yes Enclosed
5.5	Indemnity against all damages and claims.	Yes Enclosed	Yes Enclosed
5.6	Traffic movement during laying of Overhead HT Transmission line to be managed by the applicant.	Yes Enclosed	Yes Enclosed
5.7	If any claim is raised by the Concessionaire then the same has to be paid b the applicant.	Yes Enclosed	Yes Enclosed
5.8	Prior approval of NHAI shall be obtained before undertaking any work of installation, shifting or repairs, alteration to the overhead HT transmission line located in the National Highway Right-of-ways.	Yes Enclosed	Yes Enclosed
5.9	Expenditure, if any, incurred by NHAI for repairing any damage caused to the National Highway by laying, maintenance or shifting of the overhead HT line will be borne by the applicant agency owning the line.	Yes Enclosed	Yes Enclosed
5.10	If the MoRTH/NHAI considers it necessary in future to move the utility line for any work of improvement or repair to the road, it will be carried out as desired by the MoRTH/NHAI at the cost of agency owning the utility line within the reasonable time (not exceeding 60 days) of the intimation given.	Yes Enclosed	Yes Enclosed
5.11	Text of the license deed is as per verbatim of MORTH format issued vide ministry's circular no.RW-NH-33044 /29/2015/S&R(R) dated: 22-11-2016	Yes Enclosed	Yes Enclosed

AM GREEN ENERGY PVT LTD. HYDERABAD

ALASEEMA EXPRESS WAY PVT. LTD.

L.N. MALVIYA INFRA PROJECTS PVT. LTD. In association with Highway Engineering Consultant NH-40

PROJECT DIRECTOR
NHAI, P.I.U. KADAPA.

Dy. Manager (T)
NHAI, P.I.U. KADAPA

Sl. No	Item	Information /Status	IE comments
5.12	**Certificate from the applicant in the following format**		
	(i) Laying of Overhead HT line will not have any deleterious effects on any of the bridge components and roadway safety for traffic. **(ii)** For 6 laning "We do undertaking that we will relocate service road/approach road/Utilities at my/our own cost notwithstanding the permission granted within such time as will be stipulated by NHAI for future four / six laning or any other development."	Yes Enclosed	Yes Enclosed
6	Who will sign the agreement on behalf of Overhead HT transmission line agency.	Krishnendu Roychowdhury, Sr. General Manager - Transmission & Regulatory, M/s AM Green Energy Pvt Ltd, Hyderabad	Krishnendu Roychowdhury, Sr. General Manager - Transmission & Regulatory, M/s AM Green Energy Pvt Ltd, Hyderabad
6.1	Power of attorney to sign the agreement is available or not.	Yes	Yes
7	**Certificate from the Project Director**		
7.1	Certificate for confirming of all standard conditions issued vide Ministry's circular no. RW/NH/33044/29/ 2015/S&R(R) Dated.22-11-2016.	Yes	Yes
7.2	**Certificate from PD in the following format**		
	(i) It is certified that any other location of the Overhead HT line would be extremely difficult and unreasonable costly and the crossing of Overhead HT line will not adversely affect the design, stability and traffic safety of the Highway nor the likely future improvement such as widening of the carriageway, easing of curve etc."	Yes	Yes
	(ii) For 6-fanning **(a)** Where feasibility is available "I do certify that there will be no hindrance to proposed six-laning based on the feasibility report considering proposed structure at the said location" **(b)** In case feasibility report is not available "I do certify that sufficient ROW at site for accommodating proposed 6 lining"	NA	NA
8	If NH section proposed to be taken up by NHAI on BOT basis a clause is to be inserted in the agreement. "The permitted highway on which licensee has been granted the right to lay overhead power transmission line has also been granted as a right of way to the concessionaire under the concession agreement for Design Engineering, Financing, Procurement, Construction, Operation & Maintenance of 4 laning of Cuddapah–Kurnool section of NH-18 from the existing Km 167.750 to Km 356.502 in the State of Andhra Pradesh under NHDP Phase-III on BOT (Build Operate and Transfer basis) and the licensee shall honour the same.	To be inserted in the fresh License deed / Agreement	To be inserted in the fresh License deed / Agreement

AM GREEN ENERGY PVT LTD. HYDERABAD

RAYALASEEMA EXPRESS WAY PVT LTD

L.N. MALVIYA INFRA PROJECT (Association with Highway Engineers) NH-40 NANDYAL

PROJECT DIRECTOR
NHAI, P.I.U. KADAPA.

Dy. Manager (T)
NHAI, P.I.U. KADAPA.

Sl. No	Item	Information /Status	IE comments
9	Who will supervise the work of laying of Overhead HT Transmission line		
	a) On behalf of the applicant	Krishnendu Roychowdhury, Sr. General Manager - Transmission & Regulatory, Mls AM Green Energy Pvt Ltd, Hyderabad	Krishnendu Roychowdhury, Sr. General Manager - Transmission & Regulatory, Mls AM Green Energy Pvt Ltd, Hyderabad
	b) On behalf of MORTH/NHAI	PD, NHAI-PIU, Kadapa	PD, NHAI-PIU, Kadapa
10	Who will ensure that the defects in road portion after lying of utility line are corrected and if not corrected then what action will be taken.		
	a) On behalf of the applicant	Krishnendu Roychowdhury, Sr. General Manager - Transmission & Regulatory, M/s AM Green Energy Pvt Ltd, Hyderabad	Krishnendu Roychowdhury, Sr. General Manager - Transmission & Regulatory, M/s AM Green Energy Pvt Ltd, Hyderabad
	b) On behalf of NHAI	PD, NHAI-PIU, Kadapa	PD, NHAI-PIU, Kadapa
11	Who will pay the claims for damages done/ disruption in working of concessionaire if asked by the concessionaire	Krishnendu Roychowdhury, Sr. General Manager - Transmission & Regulatory, M/s AM Green Energy Pvt Ltd, Hyderabad	Krishnendu Roychowdhury, Sr. General Manager - Transmission & Regulatory, M/s AM Green Energy Pvt Ltd, Hyderabad
12	A certificate from PD that he will enter the proposed permission in the register of records of the permission in the prescribed Proforma (copy enclosed)	Yes	Yes
13	If any previous approval is accorded for laying of Overhead HT Line crossing then photocopy of register of records of permission accorded (as maintained by PD) be enclosed.	NA	NA

Applicant

AM GREEN ENERGY PVT LTD. HYDERABAD

Concessionaire

RAYALASEEMA EXPRESS WAY PVT. LTD.

Independent Engineer

L.N. MALVIYA INFRA PROJECTS PVT. LTD. In association with Highway Engineering Consultant NH-40 NANDYAL

Project Director

PROJECT DIRECTOR
NHAI, P.I.U. KADAPA.

Dy. Manager (T)
NHAI, P.I.U. KADAPA.

ArcelorMittal

CERTIFIED TRUE COPY OF THE CIRCULAR RESOLUTION PASSED BY THE BOARD OF DIRECTORS OF AM GREEN ENERGY PRIVATE LIMITED (THE "COMPANY") ON 13th DAY OF OCTOBER 2023

Delegation of general authorisation to officials for signing and executing documents for and on behalf of the Company in relation to the 989 Mega-Watt (MW) Hybrid Renewable Power Plant being developed by the Company at Kurnool, Andhra Pradesh

"RESOLVED THAT in supersession of the earlier resolutions passed in this regard, approval of the Board of Directors (the "**Board**") of AM Green Energy Private Limited (the "**Company**") be and is hereby accorded severally to the below mentioned officials of the Company ("**Authorised Signatories**") to prepare, finalise, negotiate, sign and execute all documents, including but not limited to applications, affidavits, agreements, deeds, letters, instruments and papers, etc., (including any amendment(s), modification(s) or alteration(s) thereto) for obtaining any and all clearances, licenses and permits for the 989 Mega-Watt (MW) hybrid renewable power plant being constructed and developed by the Company at Kurnool district, Andhra Pradesh, from time to time and to do all acts, deeds, matters and things as may be necessary and incidental thereto:

Sr. No.	Name of Official	Designation
i.	Mr. Sameer Mathur	Business Head
ii.	Mr. Srinivasa Rao	Assistant Vice President – Asset Management
iii.	Mr. Ashok Kamboj	Sr. General Manager – Head – Contracts & Procurement
iv.	Mr. Sridhar Paravada	Sr. General Manager- Project Coordination & Quality Assurance
v.	Mr. Krishnendu Roychowdhury	Sr. General Manager - Transmission and Regulatory Approvals
vi.	Mr. Ajay Sunkari	Sr. General Manager - Head- Business Development & Regulatory

RESOLVED FURTHER THAT the above authority shall be valid till the Authorised Signatory(ies) ceases to be an employee of the Company or unless revoked by the Board, whichever is earlier, without affecting the authority of the other Authorised Signatory(ies);

RESOLVED FURTHER THAT any Director of the Company or Company Secretary be and are hereby severally authorised to issue a certified extract of the aforesaid resolutions, whenever necessary."

CERTIFIED TRUE COPY

For **AM Green Energy Private Limited**

Harshwardhan Kakkar
Company Secretary
Membership No. A42365

AM GREEN ENERGY PRIVATE LIMITED

Date: October 13, 2023
Place: Mumbai

भारतीय गैर न्यायिक

भारत

पचास रुपये रु.50

FIFTY RUPEES Rs.50

सत्यमेव जयते

INDIA

INDIA NON JUDICIAL

ఆంధ్రప్రదేశ్ आन्ध्र प्रदेश ANDHRA PRADESH

AZ 882321

431 27/9/2023 BSD - Purchased By: Mr. Krishnendu Roy Chowdhary S/o Rana Basanta Roy Chowdary Hyd For whom: - AM Green Energy PVT LTD., Hyderabad

K. Lakshmi
K. LAKSHI, Stamp Vendor
Lice. No. 12-21-0023/2020
Rev L. No : 12-21-0026/2023/24
6-1-760, Near Viswabharathi School
Kovur Nagar, ANANTAPURAMU.
SRL No 1221-015/2023

AGREEMENT REGARDING GRANTING OF RIGHT OF WAY PERMISSIONS FOR LAYING UTILITY SERVICES ON NATIONAL HIGHWAYS

Agreement to laying of Overhead Electric Power Transmission line across National Highway No. 40 at Km 328.253 i.e., in between km.328.250 to Km 328.400 Near Hussainapuram village, Orvakal Mandal in Kurnool Dt., Andhra Pradesh.

This Agreement made this day of of between acting in his executive capacity through National Highways Authority of India (hereinafter referred to as the "Authority" which expression shall unless excluded by or repugnant to the context, include his successors in office and assigns) on the one part and M/S AM Green Energy Private Limited, Hyderabad, a company

AM GREEN ENERGY PVT. LTD. HYDERABAD

registered under the Companies Act, 1956 and having its Registered office Near MYHOME TWITZA, 5th Floor, Plot No. 30/A, Survey No. 83/1, APIIC Knowledge City of Raidurg, Rangareddy Dist. Hyderabad-500081, Telengana, India (hereinafter called the "Licensee") which expression shall unless excluded by repugnant to the context, include his successors/administrator assignees on the second part.

Whereas the Authority is responsible, inter-alia for development and maintenance of Lands in Kadapa (at Km 167.750) to Kurnool (at Km 356.502) section of NH 40 RoW.

Whereas the Licensee proposes to lay crossing line 400 KV Double Circuit Twin moose Transmission line from Kodumur PSS to Central Pooling Switching Station across National Highway No. 40 at Km 328.253 i.e., in between km.328.250 to Km 328.400 Near Hussainapuram village, Orvakal Mandal in Kurnool Dt., Andhra Pradesh referred to as utility services in subsequent paras.

Whereas the Licensee has applied to the Authority for permission to lay utility services at Km 328.253 across road/route

And whereas, the Authority has agreed to grant such permission for way leave on the NH RoW as per terms and conditions hereinafter mentioned.

Now this agreement witnesseth that in consideration of the conditions hereinafter contained and on the part of the Licensee to be observed and performed, the Authority hereby grants to the Licensee permission to lay utility services as per the approved drawing attached hereto subject to the following conditions, namely.

1. RoW permissions are only enabling in nature. The purpose of extending the wayleave facility on the National Highway RoW is not for enhancing the scope of activity of a utility service provider, either by content or by intent. Further, enforceability of the permission so granted shall be restricted only to the extent of provisions/scope of activities defined in the license agreement & for the purpose for which it is granted.

2. No Licensee shall claim exclusive right on the RoW and any subsequent user will be permitted to use the RoW, either above or below, or by the side of the utilities laid by the first user, subject to technical requirements being fulfilled. Decision of the Authority in relation to fulfilment of technical requirements shall be final and binding on all concerned parties. In case any disruption/damage is caused to any existing user by the subsequent user, the Authority shall not be held accountable or liable in any manner.
3. The Licensee shall be responsible for undertaking all activities including, but not limited to site identification, survey, design, engineering, arranging finance, project management, obtaining regulatory approvals & necessary clearances, supply of equipment, material, construction, erection, testing and commissioning, maintenance and operation and all other activities essential or required for efficient functioning of their own utility/ industrial infrastructure facilities.
4. The Licensee shall pay license fees @ Rs /sq m/month to the Authority. The License fee shall become payable from the date of handing over of RoW land to the Licensee, for laying of utilities/cables/conduits/pipelines for infrastructure/ service provider. As regards Tariff and Terms and conditions for providing common utility ducts along National Highways, there shall be a separate agreement regime.
5. Fee shall have to be paid in advance for the period for which permission is granted for entering into a license agreement. In case of renewal, rate prevailing at the time of renewal shall be charged. Delay in deposition of fee shall attract interest @ 15% per annum compounded annually.
6. Present policy of the MoRT&H is to provide a 2.00 m wide utility corridor on either side of the extreme edge of RoW. In cases where utility ducts with sufficient space are already available along NH, the utility services shall be laid in such ducts subject to technical requirements being fulfilled.
7. The utility services shall be laid at the edge of the RoW. In case of restricted width of RoW, which may be adequate only to accommodate the carriageway, centralverge, shoulders, slopes of embankment, drains, other road side furniture etc; the utility services shall be laid beyond the toe line of the embankments and clear of the drain.

8. The Licensee shall make his own arrangement for crossing of cross drainage structure, rivers, etc. below the bed. In case, this is not feasible, the utility services may be carried outside the railings/parapets and the bridge superstructure. The fixing and supporting arrangement with all details shall be required to be approved in advance from the concerned Highway Administration. Additional cost on account of fixing and supporting arrangement as assessed by the Authority shall be payable by the Licensee.
9. In exceptional cases, where RoW is restricted the utility services can be allowed beneath the carriageway of service road, if available, subject to the condition that the utility services be laid in concrete ducts, which will be designed to carry traffic on top. The width of the duct shall not be less than one lane. In such cases, it also needs to ensure that maintenance of the utility services shall not interfere with the safe and smooth flow of traffic. The cost of operation and maintenance will have to be borne by the Licensee.
10. It is to be ensured that at no time there is interference with the drainage of the road land and maintenance of the National Highways. Towards this, the top of the utility services shall be at least 0.6 metre below the ground level. However, any structure above ground shall be aesthetically provided for / landscaped with required safety measures as directed by the concerned Authority.
11. The utility services shall be permitted to cross the National Highway either through structure or conduits specially built for that purpose. The casing / conduit pipe should, as minimum, extend from drain to drain in cuts and toe of slope to toe of slope in the fills and shall be designed in accordance with the provision of IRC and executed following the Specifications of the Ministry.
12. Existing drainage structures shall not be allowed to carry the lines across.
13. NA
14. The utility services shall cross the National Highway preferable on a line normal to it or as nearly so as practicable.
15. The casing/conduit pipe for crossing the road may be installed under the road embankment either by boring or digging a trench. Installation by boring method shall be preferred.

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16. In case of trenching, the sides of the trench should be done as nearly vertical as possible. The trench width should be at least 30 cm. but not more than 60 cms wider than the outer diameter of the pipe. Filling of the trench shall conform to the specifications contained here-in-below or as supplied by the Highway Authority.
    a. Bedding shall be to a depth not less than 30 cm. It shall consist of granular material, free of lumps, clods and cobbles, and graded to yield a firm surface without sudden change in the bearing value. Unsuitable soil and rock edges should be excavated and replaced by selected material.
    b. The backfill shall be completed in two stages (i) Side-fill to the level of the top of the pipe (ii) Overfill to the bottom of the road crust.
    c. The side fill shall consist of granular material laid in 15 cm. Layers each consolidated by mechanical tamping and controlled addition of moisture to 95% of the Proctor's Density. Overfill shall be compacted to the same density as the material that had been removed. Consolidation by saturation or ponding will not be permitted.
    d. The road crust shall be built to the same strength as the existing crust on either side of the trench or to thickness and specifications stipulated by the Highway Authority.
17. The Licensee shall ensure making good the excavated trench for laying utility services by proper filling and compaction, so as to restore the land in to the same condition as it was before digging the trench, clearing debris/loose earth produced due to execution of trenching at least 50m away from the edge of the right of way;
18. All required restoration work subsequent to laying of Overhead Electric Power Transmission line across National Highway No. 40 at Km 328.253 i.e., in between km.328.250 to Km 328.400 Near Hussainapuram village, Orvakal Mandal in Kurnool Dt., Andhra Pradesh, shall be required to be undertaken by the Licensee at its cost either by itself or through its authorized representative in consultation with the Authority as per predetermined time schedule and quality standards.
19. Prior to commencement of any work on the ground, a performance Bank Guarantee @Rs. per route metre / Rs per sq m with a validity of one year initially (extendable if required till satisfactory completion of work) shall have to be furnished by the Licensee to the Authority/its designated agency as a security against improper restoration of ground in terms of

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filling/unsatisfactory compaction damages caused to other underground installations/utility services & interference, interruption, disruption or failure caused thereof to any services etc. In case of the Licensee failing to discharge the obligation of making good of the excavated trench/other restoration work, the Authority shall have a right to make good the damages caused by excavation, at the cost of the Licensee and recover the amount by forfeiture of the Bank Guarantee.

20. In case, the Performance Bank Guarantee is invoked as mentioned above, the Licensee shall be required to replenish and reinstate the required Performance Bank Guarantee within one month of such invoking. In case the work contemplated herein is not completed to the satisfaction of the Authority, which has granted the permission, within a period of 11 months from the date of issue of the Bank Guarantee, the Licensee shall either furnish a fresh guarantee or extend the guarantee for a further period of one year. Notwithstanding this, the Licensee shall be liable to pay full compensation to the aggrieved Authority/ its designated agency for any damage sustained by them by reason of the exercise of the RoW facility;

21. The Licensee shall shift the utility services within 90 days (or as specified by the respective Authority) from the date of issue of the notice by the concerned Authority to shift/relocate the utility services, in case it is so required for the purpose of improvement/widening of the road/route/highway or construction of flyover/bridge and restore the road/land to its original condition at his own cost and risk.

22. The Licensee shall be responsible to ascertain from the respective agency in coordination with Authority, regarding the location of other utilities /underground installations/ facilities etc. The Licensee shall ensure the safety and security of already existing underground installations/utilities/facilities etc. before commencement of the excavation/using the existing cable ducts. The Licensee shall procure insurance from a reputed insurance company against damages to already existing underground installations/utilities/facilities etc.

23. The Licensee shall be solely responsible/ liable for full compensation/indemnification of concerned agency / aggrieved Authority for any direct, indirect or consequential damage caused to them/claims or replacements sought for, at the cost and risk of the Licensee. The concerned

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agency in coordination with Authority shall also have a right make good such damages/ recover the claims by forfeiture of Bank Guarantee.

24. If the Licensee fails to comply with any condition to the satisfaction of the Authority, the same shall be executed by the Authority at the cost and risk of the Licensee.

25. Grant of License is subject to the Licensee satisfying (a) minimum disruption of traffic and (b) no damage to the highways. As far as possible, the Licensee should avoid cutting of the road for crossing highway, and other roads and try to carry out the work by trenchless technology. In case any damage is caused to the road pavement in this process, the Licensee will be required to restore the road to the original condition at its cost. If due to unavoidable reasons the road needs to be cut for crossing or laying utility services, the Licensee has to execute the restoration work in a time bound manner at its cost either by itself or through its authorized representative in consultation with the Authority as per predetermined time schedule and quality standards. In case of the Licensee failing to discharge the obligation of making good of the excavated trench/other restoration work, the Authority shall have a right to make good the damages caused by excavation, at the cost of the Licensee and recover the amount by forfeiture of the Bank Guarantee.

26. The Licensee shall inform/give a notice to the concerned agency designated by the Authority at least 15 days in advance with route details prior to digging trenches, for fresh or maintenance/repair works. A separate performance Bank Guarantee for maintenance/repair works shall have to be furnished by the Licensee.

27. Each day, the extent of digging the trenches should be strictly regulated so that utility services are laid and trenches filled up before the close of the work that day. Filling should be completed to the satisfaction of the concerned agency designated by the Authority.

28. The licensee shall indemnify the concerned agency in co-ordination with Authority, against all damages and claims, if any due to the digging of trenches for laying cables/ducts.

29. The permission for laying utility services is granted maximum for 5 years at a time, which can thereafter be considered for renewal. On payment of

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additional fee at the time of renewal, the permission shall automatically be renewed, unless defaults exist. In case of renewal, rate prevailing at the time of renewal shall be charged. Delay in deposition of fee shall attract interest @ 15% per annum compounded annually.

30. The permission shall be valid only for the period it is issued and fee deposited. However, the Authority also has a right to terminate the permission or to extend the period of Agreement.

31. That the Licensee shall not undertake any work of shifting, repairs or alterations to the utility services without prior written permission of the concerned agency in coordination with the Authority.

32. The permission granted shall not in any way be deemed to convey to the Licensee any ownership right or any interest in route/road/highway land /property, other than what is herein expressly granted. No use of NH RoW will be permitted for any purpose other than that specified in the Agreement.

33. During the subsistence of this Agreement, the utility services located in highway land / property shall be deemed to have been constructed and continued only by the consent and permission of the Authority so that the right of the Licensee to the use thereof shall not become absolute and indefeasible by lapse of time.

34. The Licensee shall bear the Stamp Duty charged on this Agreement.

35. Three copies of 'as laid drawings' of utilities (hard and soft copies) with geo-tagged photographs and geo-tagged video recordings of laying of Overhead Electric Power Transmission line across National Highway No. 40 at Km 328.253 i.e., in between km.328.250 to Km 328.400 Near Hussainapuram village, Orvakal Mandal in Kurnool Dt., Andhra Pradesh (with respect to the NH) and after complete restoration shall be submitted to the Authority for verification and record within a month of completion of works.

36. The Licensee shall allow free access to the Site at all times to the authorised representatives of Authority to inspect the Project Facilities and to investigate any matter within their Authority, and upon reasonable notice, shall provide reasonable assistance necessary to carry out their respective duties and functions.

37. The utility services shall not be made operational by the Licensee unless a completion certificate to the effect that the utility services has been laid in

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accordance with the approved specifications and drawings and the trenches have been filled up to the satisfaction of the concerned agency in co-ordination with the Authority has been obtained. Notwithstanding anything contained herein, this Agreement may be cancelled at any time by Authority for breach of any condition of the same and the Licensee shall neither be entitled to any compensation for any loss caused to it by such cancellation not shall it be absolved from any liability already incurred.

38. The Licensee shall ensure adherence to relevant Indian standards and follow best industry practices, methods and standards for the purpose of ensuring the safe,efficient and economic design, construction, commissioning, operation, repair and maintenance of any part of the utility lines/industrial infrastructure facilities and which practices, methods and standards shall be adjusted as necessary, to take account of:

    a. operation, repair and maintenance guidelines given by the manufacturers,
    b. the requirements of Law,
    c. the physical conditions at the Site, and
    d. the safety of operating personnel and human beings.

39. The Licensee shall have to provide safety measures like barricading, danger lighting and other necessary caution boards while executing the work.

40. While laying utility services, at least one lane of road shall be kept open to traffic at all times. In case of single lane roads, a diversion shall be constructed. If any traffic diversion works are found necessary during the working period such diversion shall be provided at the cost of Licensee.

41. After the termination/expiry of the agreement, the Licensee shall remove the utility services within 90 days and the site shall be brought back to the original condition failing which the Licensee will lose the right to remove the utility services. However before taking up the work of removal of utility services the Licensee shall furnish a Bank Guarantee to the Authority for a period of one year for an amount assessed by the Authority as a security for making good the excavated trench by proper filling and compaction, clearing debris, loose earth produced due to excavation of trenching at least 50m away from the edge of the RoW.

42. Any disputes in interpretation of the terms and conditions of this Agreement or their implementation shall be referred to the redress mechanism

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prevailing in the Ministry and the decision of the redress mechanism shall be final and binding on all.

43. For PPP Projects, in case of any financial loss incurred by the respective project concessionaires due to such laying/shifting of utility services by the Licensee, compensation for the same shall be required to be borne by the Licensee in mutual agreement with the respective project concessionaires. MoRT&H/ NHAI/implementing authorities for the project shall not be liable to the concessionaire in any way in this regard.

This agreement has been made in duplicate, each on a Stamp Paper, Each party to this Agreement has retained one stamped copy each.

IN WITNESS WHEREOF THE PARTIES HERETO HAVE CAUSED THIS AGREEMENT TO BE EXECUTED THROUGH THEIR RESPECTIVE AUTHORISED REPRESENTATIVES THE DAY AND THE YEAR FIRST ABOVE WRITTEN.

SIGNED SEALED AND DELIVERED FOR AND ON BEHALF OF AUTHORITY.

Signed by Sri K. Sreedhar Reddy

For M/s A M Green Energy Private Limited, Hyderabad

AM GREEN ENERGY PVT. LTD. HYDERABAD

N. Srinivasulu

In the presence of

1. N. SREENIVASULU.
Name in full (Signature) with designation

2. C. SREEHARI GANESH
C. Sreehari
Name in full (Signature) with designation

Signed by Sri _____

Project Director, National Highways Authority of India (For and on behalf of President of India)

1. _____
Name in full (Signature) with designation

2. _____
Name in full (Signature) with designation

101-
ఆంధ్రప్రదేశ్ आंध्र प्रदेश ANDHRA PRADESH For whom:
Krishnendu Roy chowdary, AM Green-
Energy PVT LTD, Hyderabad

1624
29-09-2023

14AB 514627
P. Shashank
PASUPULETI SHASHANK
Stamp Vendor
L.C. No: 12-06-0091/2023
Kovvuru Nagar. Anantapuramu

UNDERTAKING

It is proposed to carry out stringing activity of 400 KV Double Circuit Twin moose Transmission line from Kodumur PSS to Central Pooling Switching Station, Hussainapuram Village, Orvakal Mandal, Kurnool (D) between the angle points AP44 and AP45 near Somayajulu palli Village, Orvakal Mandal, Kurnool (D). This section is crossing National Highway NH-40 (Kadapa to Kurnool section) near Hussainapuram Village at Km.328.253 i.e., between the KM stones from Km 328.250 to Km.328.400 towards Kurnool. This section of the National Highway is under the control of Project Director, Project Implementation Unit, NHAI, Kadapa.

Stringing would be executed by M/s AM Green Energy Private Limited, Hyderabad.

In this context, I (Krishnendu Roychowdhury, Sr. General Manager, Hyderabad), on behalf of M/s AM Green Energy Private Limited, Hyderabad, hereby undertake that,

a) We would pay or compensate for any damages caused to the NHAI property as per the directions of the PD, PIU, NHAI, Kadapa on Highway at Km 328.253 during the execution of the above work.

b) We will ensure compliance during stringing the stringing work of all safety norms that may be specified by NHAI from time to time for safe plying of the road traffic on High way at Km 328.253 during the execution of the above work.

Krishnendu Roychowdhury

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c) We will ensure that the traffic movement during stringing work will be managed by M/s AM Green Energy Private Limited, Hyderabad.

d) During the 6 laning or further development works of the National Highway-40 (Kadapa to Kurnool section), we will relocate the transmission lines at our own cost as per the instructions of NHAI.

e) If necessary, we will shift the electric power transmission lines out of working zone of NHAI as and when required by NHAI at our own cost. However, if delay in shifting the same by us happens and if NHAI wants to shift the same at their cost, then any kind of damage to the M/s AM Green Energy Private Limited & NHAI property and any sort of disturbance to the public user occurred will be the responsibility of M/s AM Green Energy Private Limited only.

f) We will submit required licensee fee for crossing of 01 no 400 KV Double Circuit Twin moose Transmission line from Kodumur PSS to Central Pooling Switching Station, Hussainapuram Village, Orvakal Mandal, Kurnool (D)., Andhra Pradesh, as and when directed by NHAI.

g) We will follow the provisions of IRC 32-1969, CEA Regulations/ Statutory provisions of Indian Electricity rules and other relevant guidelines issued.

AM GREEN ENERGY PVT. LTD. HYDERABAD

भारतीय गैर न्यायिक

भारत

दस रुपये

TEN RUPEES

रु.10

Rs.10

सत्यमेव जयते

INDIA

INDIA NON JUDICIAL

Serial No:71648
Purchased By :
KRISHNENDU ROYCHOWDHARY
SELF
HYDERABAD

Denomination: 10

Date13-07-2023

For
AM GREEN ENERGY PVT LTD

Stamp S. no 14AB 537759

ఆంధ్ర ప్రదేశ్ ANDHRA PRADESH 14AB 537759

Sub Registrar
Ex. Offico Stamp Vendor
SRO Ananthapur (R.O)

UNDERTAKING

1. The work of Erection of 400 KV Double Circuit Twin moose Transmission line from Kodumur PSS to Central Pooling Switching Station, Hussainapuram Village, Orvakal Mandal, Kurnool (D)., Andhra Pradesh crossing of National Highway NH-40 (Kadapa to Kurnool section) Near Hussainapuram village, Orvakal Mandal Kurnool (D) at Km 328.253 will be carried out only after getting approval from the Competent Authority,

2. We shall be responsible for safety of all construction works, such as Erection of towers, Stringing of line along and across the NH road.

3. We shall inform the officers of NHAI at least 15 days in advance before starting the work.

4. We shall not, without prior permission in writing of the concern officers of the NHAI undertake any shifting and other alteration works of this erected power lines.

5. NHAI shall not be responsible for any damage caused to the power supply lines or by any activity of our side on the permitted highway. The parties are agreed that we are laying the power supply lines on the permitted highway at its own cost.

Krishnendu Roychowdhary

AM GREEN ENERGY PVT. LTD. HYDERABAD

6. The excavated tower pit shall be properly back filled, so as to restore the land in the same condition as it was before the excavation of the pits and shall clear the debris/ loose earth produced from the execution of the tower erection and lines.

7. We agree to abide by the directions of the concerned officer of NHAI appointed in accordance with the National Highways act 1956 and rules in force. Certified that no damage to the other utility will be done, if damaged then to pay the losses either to NHAI or to the concerned agency.

8. We are conforming all standard conditions of NHAI guidelines.

9. We shall be responsible for shifting of the electrical line as and when required by NHAI at our own cost.

10. We shall be responsible for shifting due to 6 Lanning/ widening of NH.

11. We agree indemnity against all damages and claims clause.

12. We will manage traffic movement during laying of power supply line.

13. We undertake to shift the electrical lines and supporting tower structures at any time owing to the expansion of the road or if necessary by NH authorities.

14. We will borne expenditure if any incurred by NHAI for repairing any damages caused to National Highway by the laying of the line, maintenance or shifting of the electrical supply line will be borne by the agency owning the line.

15. If the NHAI considers, if necessary, in future to move the utility line for any work of improvement or repairs to the road, it will be carried out as desired by the NHAI at the cost of ours owing the utility line within a reasonable time.

16. Certify that laying of electrical supply line will not have any deleterious effects on any of the bridge components and road way safety for traffic.

17. We will not damages any avenue plantation during the execution of our work. However, if any un-avoidable damage happens to plantation, then we will replace the plants in 1:5 ratio as per the standard specifications of NHAI at our own cost including maintenance for 5 years.

18. We will provide safety measures like barricading, danger lighting and other necessary cautionary boards while executing the work.

19. We shall ensure the safety and security of already existing utilities.

20. We shall arrange all the clearances including Forest Clearance required for laying the utility as per drawing. We shall also arrange for shifting of utilities, if required at his own cost as per the directions of concerned Department.

21. We shall ensure that at no time there is interference with drainages of road, land and maintenance of NH.

22. If any claim is raised by the Concessionaire/contractor due to damages then the same has to be paid by us.

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23. We will submit the License Fee and Bank Guarantee, if any applicable for the above said transmission line crossing work, then the same will be paid by us.

24. We will obtain prior approval of NHAI before undertaking any work of installation, shifting or repair of alterations to the utility line located in National Highway right-of-ways.

25. The expenditure, if any incurred by NHAI for repairing any damage caused to the National Highway by laying, maintenance or shifting of the utility line will be borne by us.

26. The text of the license deed is as per verbatim of MORTH format issued vide ministry's circular number : RW-NH-33044/29/2015/S&R(R) dated: 22-11-2016.

27. We has obtained various safety clearances from the representative authorities such as Directorate of Electricity. Chief controller of Explosives. Petroleum and Explosive Safety Organization. Oil Industry Safety Directorate. State/Central Pollution Control Board and any other statutory clearances applicable, before applying to Highway Administration.

28. If the MoRTH/NHAI considers it necessary in future to move the utility line for any work of improvement or repair to the road, it will be carried out as desired by the MoRTH/NHAI at our own cost within the reasonable time (not exceeding 60 days) of the intimation given.

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AM GREEN ENERGY PVT. LTD. HYDERABAD

Serial No:71647 Denomination: 10 Date13-07-2023 Stamp S. no 14AB 537758
Purchased By :
KRISHNENDU ROYCHOWDHARY
SELF
HYDERABAD

For
AM GREEN ENERGY PVT LTD

Sub Registrar
Ex. Offico Stamp Vendor
SRO Ananthapur (R.O)

CERTIFICATE

The work of Erection of 400 KV Double Circuit Twin moose Transmission line from Kodumur PSS to Central Pooling Switching Station, Hussainapuram Village, Orvakal Mandal, Kurnool (D)., Andhra Pradesh crossing of National Highway NH-40 (Kadapa to Kurnool section) Near Hussainapuram village, Orvakal Mandal Kurnool (D) at Km 328.253.

1. We hereby certify that

   a) Laying of utility line will not have any deleterious effects on any of the bridge components and roadway safety for traffic.

   b) We do undertaking that we will relocate service road/approach road/Utilities at my/our own cost notwithstanding the permission granted within such time as will stipulated by NHAI for future six lining or any other development.

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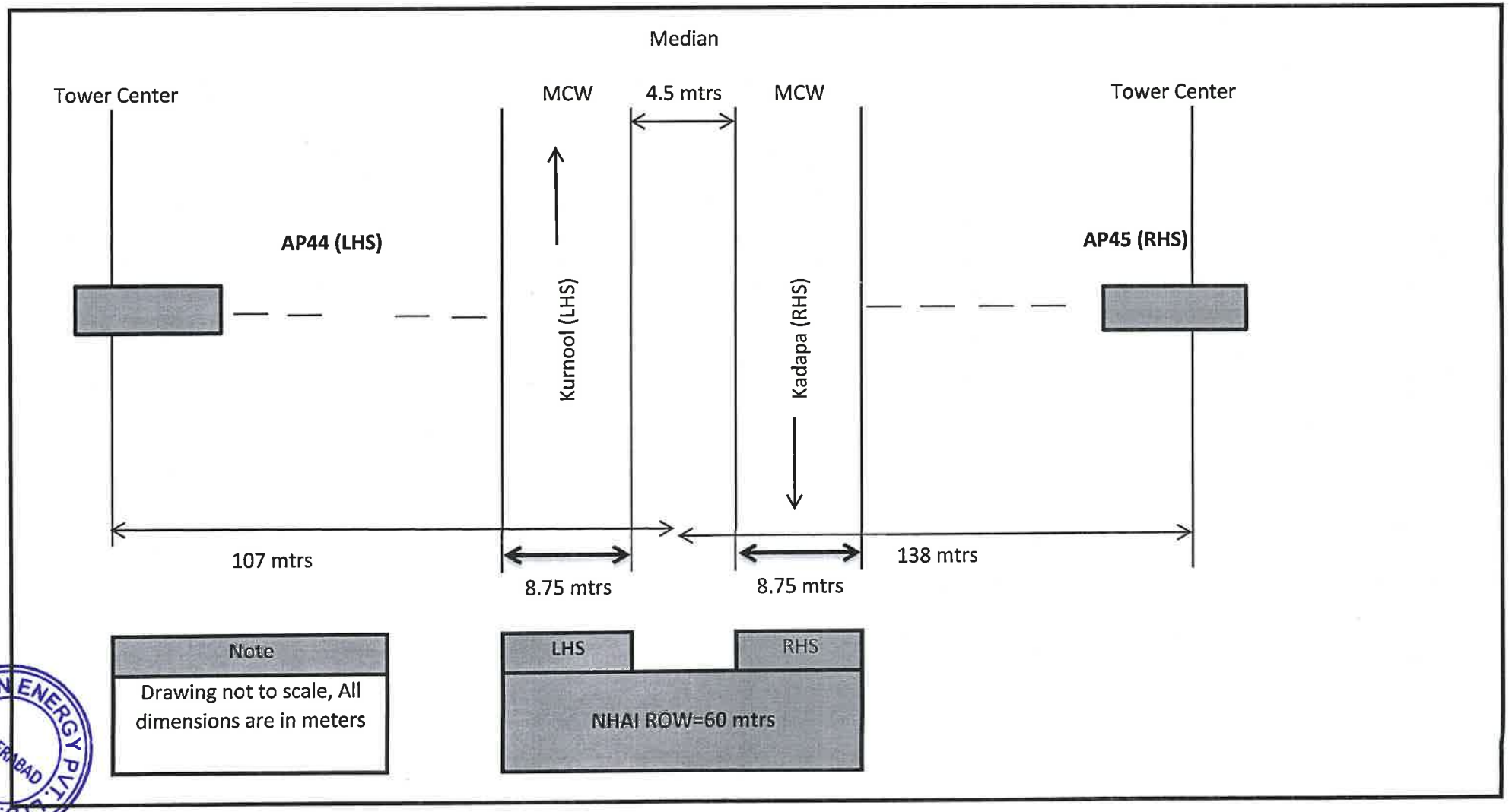
M/s AM GREEN ENERGY PRIVATE LIMITED

Strip plan showing the Crossing of 400KV double circuit twin moose transmission line from Kodumur PSS to Central Pooling switching station at Km 328.253 i.e., between the KM stones 328.250 to 328.400 from LHS to RHS of NH-40 near Hussainapuram village, Oravkal Mandal in Kurnool Dt., Andhra Pradesh.



AM GREEN ENERGY PVT. LTD. HYDERABAD

Details of Overhead Transmission line at National Highway crossing

SR	PARTICULARS	DETAILS OF PLAN & ELEVATION
1	NAME AND DETAILES OF NATIONAL HIGH WAY	NH - 40 KADAPA-KURNOOL SECTION BOTTOM CONDUCTOR HEIGHT AT CROSSING 18.6M
2	SITUATION OF THE CROSSING	B / W AP44 & AP45 FROM AP44 : 107M FROM AP45 : 138M CH : 328.253 (Between: 328/250 & 328/400 km stones)
3	SPAN AT THE CROSSING & ALSO THOSE ON EITHER SIDE ON THE CROSSING	245M PRECEDING SPAN : 349M SUCCEDING SPAN : 384M
4	ANGLE OF CROSSING	ANGLE OF CROSSING = 79 °
5	STRUCTURES USED TO CROSS THE NH - 40 AND ITS DEVATION ANGLE	AP44 - DD + 6 (08°57'51" RT) AP45 - DD + 6 (38°21'42" LT)
6	MINIMUM GROUND CLERENCE FOR NATIONAL HIGHWAY FROM BOTTOM CONDUCTOR	14 M
7	DISTANCE FROM CENTRE OF THE ROAD TO NEAREST LEG OF TOWER	AP44 - DD + 6 (107M) AP45 - DD + 6 (138M)
8	CROSSING LOCATION	Lat: 15.615613, Long: 78.173039 Near Hussainapuram village, Orvakal Mandal in Kurnool Dist, A.P.

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EARTHWIRE PROPERTIES & INITIAL COMBINATION

	PROPERTIES	
1	CONDUCTOR NAME	EARTHWIRE (GSW)
2	UTS .... (KG)	6972
3	AREA OF CONDUCTOR .... (SQ . MM)	73.65
4	WEIGHT OF CONDUCTOR .... (Kg / M)	0.583
5	DIAMETER OF CONDUCTOR .... (mm)	10.98
6	MODULUS OF ELASTICITY .... (Kg / Sq.M)	19361
7	COEFF . OF LINEAR EXPANSION .... Per Deg C	0.0000115
	INITIAL COMBINATION	
1	WIND PRESSURE ON CONDUCTOR .... (Kg / Sq.mm)	174.17
2	INITIAL CONDUCTOR TEMP .... (DEG C)	0
3	INITIAL WIND .... %	0
4	RESULTANT TENSION (Kg) AT 32 ° C & NO WIND	1212.26
5	NORMAL SPAN (M)	370

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CONDUCTOR PROPERTIES & INITIAL COMBINATION

	PROPERTIES	
1	CONDUCTOR NAME	ACSR MOOSE TWIN
2	UTS .... (KG)	16428
3	AREA OF CONDUCTOR .... (SQ . MM)	597
4	WEIGHT OF CONDUCTOR .... (Kg / M)	2.004
5	DIAMETER OF CONDUCTOR .... (mm)	31.77
6	MODULUS OF ELASTICITY .... (Kg / Sq.M)	7034
7	COEFF . OF LINEAR EXPANSION .... Per Deg C	0.0000193
	INITIAL COMBINATION	
1	WIND PRESSURE ON CONDUCTOR .... (Kg / Sq.mm)	139.82
2	INITIAL CONDUCTOR TEMP .... (DEG C)	32
3	INITIAL WIND .... %	0
4	RESULTANT TENSION (Kg) AT 32 ° C & NO WIND	3614.16

AM GREEN ENERGY PVT. LTD. HYDERABAD

M/s A M GREEN ENERGY PRIVATE LIMITED Proposed National High way no. 40 crossing of 400 KV Double Circuit Twin moose Transmission line from Kodumur PSS to Central Pooling Switching Station, Hussainapuram Village, Orvakal Mandal in Kurnool Dt.)

Methodology of carrying out the stringing

1. The aim of this exercise is to carry out the stringing of 400 KV power line across the National High way no.40 between the towers AP44 and AP45 with a span of 245 meters. The distance of tower AP 44 from centre line of the road is 107 meters (LHS) and of AP 45 is 138 meters (RHS). After the stringing a clearance of 18.6 meters would be maintained from the road surface to the bottom most conductor of the line.

2. Wooden scaffolding of 16 mts height and 3 mts width would be installed on either side of the National High way 40. A distance of 10 mts would be kept from the edge of the highway to the edge of the scaffolding to provide safe distance in case of collapse of scaffolding. This scaffolding would be carrying only Earth Wire.

3. Earth wire would be strung first as shown in the figure. To pass Earth wire over the road, a polypropylene rope (Pilot rope) would be extended from scaffolding of one side and connected to the edge of the earth wire which would be on the scaffolding on other side. Once the connection is made, the pilot rope is pulled with tractor on the other side taking the Earth wire on the wooden scaffolding. While pulling the Earth wire due to self-weight the Earth wire will take a catanory shape and hence traffic needs to be stopped for about 15 minutes.

4. Once the Earth Wire is pulled completely, it would be connected to the ends of the peak as shown in figure.

5. Later the Three conductors will be dragged in the same manner as said above in case of Earth wire by making up them on one side and every time there needs to be stoppage of traffic for about 15 minutes with time gap between one conductor and another. Likewise, both the conductors will be lifted and final stringing will be completed one by one.

6. During the above process every effort will be kept to maintain clearance from road and 15 to 20 minutes blockage of traffic would be necessary intermittently.

7. All safety measures would be followed as insisted by NHAI at the time of execution of work

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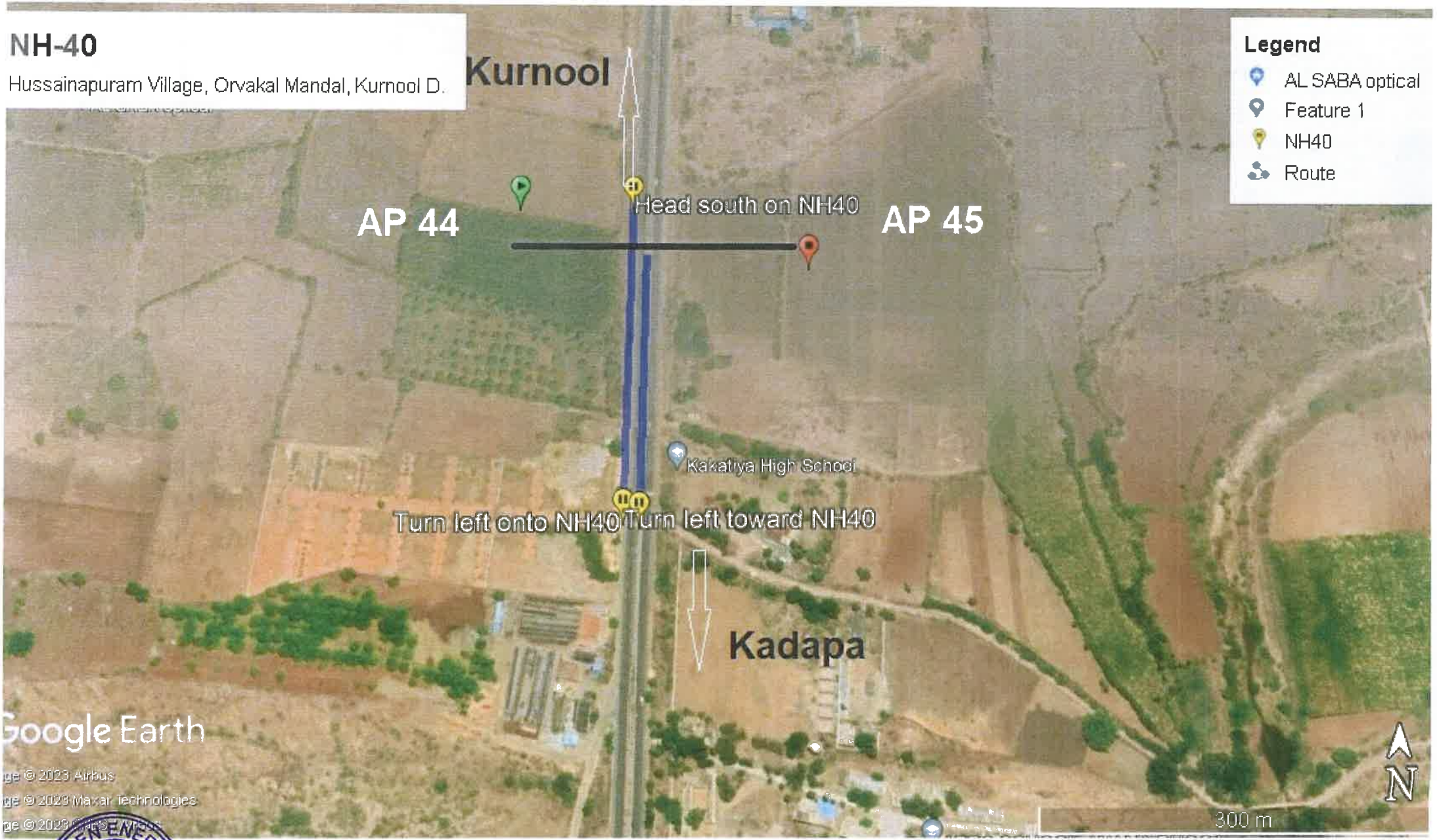

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Photographs showing the proposed 400KV crossing on BHS across NH 40 at Km.328.253

AM GREEN ENERGY PVT. LTD. HYDERABAD

12. FOUNDATIONS

12.1 The foundation designs shall conform to IS : 456-1978* and IS : 4091-1979†.

13. CLEARANCES

13.1 The minimum clearances shall be in accordance with Indian Electricity Rules, 1956 and are given in Table 1.

TABLE 1 MINIMUM CLEARANCES

Voltage Category (IE Rules, 1956)	High Voltage			Extra High Voltage		
Nominal System Voltage	22 kV	33 kV	66 kV	110 kV	132 kV	220 kV
Clearance	Minimum Value in Metres					
i) *Clearance to Ground*						
a) Across street	6·1	6·1	6·1	6·1	6·1	7·0
b) Along street	5·8	5·8	6·1	6·1	6·1	7·0
c) Other areas	5·2	5·2	5·5	6·1	6·1	7·0
ii) *Clearance to Buildings*						
a) Vertical — from highest accessible point	3·66	3·66	3·97	4·58	4·58	5·80
b) Horizontal† — from nearest point	1·83	1·83	2·14	2·75	2·75	3·66
iii) *At Crossings with*						
a) Tramway/trolley bus	2·44	2·44	3·05	3·05	3·05	3·51
b) Telecom lines	—	—	2·44	2·75	2·75	3·05
c) *Railways*§						
1) Category A section electrified on 1 500 Vdc) — Broad, metre and narrow gauge:						
Inside station limits	13·28	13·28	13·59	14·20	14·20	15·11
Outside station	11·28	11·28	11·59	12·20	12·20	13·11
2) Category B (section already electrified or likely to be converted to or electrified on 25 kV ac system within the foreseeable future) — Broad, gauge, metre and narrow gauges:						
Inside station limits	15·28	15·28	15·59	16·20	16·20	18·63
Outside station limits	13·28	13·28	13·59	14·20	14·20	15·11

(*Continued*)

*Code of practice for plain and reinforced concrete (*third revision*).

†Code of practice for design and construction of foundations for transmission line towers and poles (*first revision*).

ArcelorMittal

CERTIFIED TRUE COPY OF THE CIRCULAR RESOLUTION PASSED BY THE BOARD OF DIRECTORS OF AM GREEN ENERGY PRIVATE LIMITED (THE "COMPANY") ON 18TH DAY OF JULY 2023

Delegation of general authorisation to officials for signing and executing documents for and on behalf of the Company in relation to the 975 Mega-Watt (MW) Hybrid Renewable Power Plant being developed by the Company at Kurnool, Andhra Pradesh

"RESOLVED THAT approval of the Board of Directors (the "**Board**") of AM Green Energy Private Limited (the "**Company**") be and is hereby accorded severally to the below mentioned officials of the Company ("**Authorised Signatories**") to prepare, finalise, negotiate, sign and execute all documents, including but not limited to applications, affidavits, agreements, deeds, letters, instruments and papers, etc., (including any amendment(s), modification(s) or alteration(s) thereto) for obtaining any and all clearances, licenses and permits for the 975 Mega-Watt (MW) hybrid renewable power plant being constructed and developed by the Company at Kurnool district, Andhra Pradesh, from time to time and to do all acts, deeds, matters and things as may be necessary and incidental thereto:

Sr. No.	Name of Official	Designation
i.	Mr. Srinivasa Rao	Assistant Vice President – Asset Management
ii.	Mr. Krishnendu Roychowdhury	Sr. General Manager - Transmission and Regulatory Approvals
iii.	Mr. Sridhar Paravada	Sr. General Manager- Project Coordination & Quality Assurance

RESOLVED FURTHER THAT the above authority shall be valid till the Authorised Signatory(ies) ceases to be an employee of the Company or unless revoked by the Board, whichever is earlier, without affecting the authority of the other Authorised Signatory(ies);

RESOLVED FURTHER THAT any Director of the Company or Company Secretary be and are hereby severally authorised to issue a certified extract of the aforesaid resolutions, whenever necessary."

CERTIFIED TRUE COPY

For **AM Green Energy Private Limited**

Harshwardhan Kakkar

Harshwardhan Kakkar
Company Secretary
Membership No. A42365

AM GREEN ENERGY PRIVATE LIMITED

Date: July 18, 2023
Place: Mumbai

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
AN ISO 9001:2008 CERTIFIED MINISTRY

S&R(R) ZONE

IAHE Campus,
A-5, Sector-62,
Noida-201301.

F. No. RW/NH-33044/29/2015/S&R(R) **Dated: 22nd November, 2016**

To,

1. The Chief Secretaries of all the State Governments/ UTs
2. The Principal Secretaries/ Secretaries of all States/ UTs Public Works Department dealing with National Highways, other centrally sponsored schemes.
3. All Engineers-in-Chief and Chief Engineers of Public Works Department of States/ UTs dealing with National Highways, other centrally sponsored schemes.
4. The Director General (Border Roads), Seema Sadak Bhawan, Ring Road, New Delhi-110 010.
5. The Chairman, National Highways Authority of India, G-5 & 6, Sector-10, Dwarka, New Delhi-110 075.
6. The Managing Director, NHIDCL, PTI Building, New Delhi-110001

Subject: Accommodation of Public and Industrial Utility Services along and across National Highways – Policy guidelines regarding.

Sir,

The Government has realized that development of infrastructure across the Country on a sustainable and integrated manner continues to be an imperative for improving the state of economy, enhancing quality of life of the citizens and ensuring equitable development throughout the country.

Land being among the most precious of natural resources available, optimum utilization of land shall play a critical role in integrated development of infrastructure. One of the ways to effect such optimum utilization is leveraging land within National Highway (NH) Right of Way (ROW) for laying utility services. This may be achieved through granting permissions for laying utility services along and /or across the ROW. However, environment and safety of the road users are the prime factors in deciding permission for utility services. Permission may be denied, if it is not feasible to ensure safety and environment through requisite safeguards. The Administration of ROW, has been defined in the National Highway Land and traffic Control Act 2002 and relevant Rules 2004.

Keeping in view the need for consistency and clarity, in supersession of all the instructions contained in the earlier previous circulars on the subject, following guidelines shall apply for accommodation of Utility Services along and across National Highways.

2. Laying of Utility Services along the National Highways:

2.1 There shall be a provision for utility ducts for appropriate categories/combination of utilities in the construction of new/4-6 laning of National Highways. The ducts shall be located at appropriate location preferably as close to the extreme edge of ROW.

2.2 Utility services shall be laid in the utility ducts, if provided for the purpose.

2.3 In stretches where utility ducts have not been provided, the utility services shall be located, beyond the toe line of the embankment and drains, as close to the extreme edge of the RoW as possible. While granting permission, requirement of up-gradation also needs to be kept in view.

Manoj Kumar.

2.4 It is to be ensured that at no time there is interference with the drainage of the road land and maintenance of the National Highways. Towards this, the top of the utility services shall be at least 0.6 metre below the ground level.
2.5 No utility service shall be laid over existing culverts and bridges except through the utility ducts where such provision exists. In case of absence of such provisions, the Licensee shall make his own arrangement for crossing of cross drainage structure, rivers, etc. below the bed.
2.6 In exceptional cases, where ROW is restricted the utility services can be allowed beneath the carriageway of service road, subject to the condition that the utility services be laid in concrete ducts, which will be designed to carry traffic on top. The width of the duct in such case shall not be less than one lane. In such cases, it also needs to be ensured that maintenance of the utility services shall not interfere with the safe and smooth flow of traffic. The cost of operation and maintenance will have to be borne by the Licensee as per the agreement.

3. Laying of Utility Services across the National Highway:
3.1 The utility services shall be permitted to cross the National Highway either through structure or conduits specially built for that purpose. The casing / conduit pipe should, as minimum, extend from drain to drain in cuts and toe of slope to toe of slope in the fills and shall be designed in accordance with the provision of IRC and executed following the Specifications of the Ministry.
3.2 Existing drainage structures shall not be allowed to carry the lines across.
3.3 The utility services shall cross the National Highway preferably on a line normal to it or as nearly so as practicable.
3.4 The casing/conduit pipe may be installed under the road embankment either by boring or digging a trench. Installation by boring method shall be preferred.

3.5 In case of trenching, the sides of the trench should be done as nearly vertical as possible. The trench width should be at least 30 cm wider, (but not more than 60 cm wider), than the outer diameter of the utility pipe. Filling of the trench shall conform to the specifications contained here-in-below or as supplied by the Highway Authority.
3.5.1 Bedding shall be to a depth not less than 30 cm. It shall consist of granular material, free of lumps, clods and cobbles, and graded to yield a firm surface without sudden change in the bearing value. Unsuitable soil and rock edges should be excavated and replaced by selected material.
3.5.2 The backfill shall be completed in two stages (i) Side-fill to the level of the top of the pipe (ii) Overfill to the bottom of the road crust.
3.5.3 The side fill shall consist of granular material laid in 15 cm. Layers each consolidated by mechanical tamping and controlled addition of moisture to 95% of the modified Proctor's density. Overfill shall be compacted to the same density as the material that had been removed. Consolidation by saturation or ponding will not be permitted.
3.5.4 The road crust shall be built to the same strength as the existing crust on either side of the trench or to thickness and specifications stipulated by the Highway Authority.
3.6 When utilities are allowed overhead, the horizontal and vertical clearance in accordance with the IRC shall be maintained.

4. Procedure for processing application for granting permission for use of highway land: Any person who intends to obtain permission shall make an application online in the prescribed form to Highway Administration or an officer authorized by Highway Administration on his behalf. The application must mention details the various safety clearances from the respective authorities such as Directorate of Electricity, Chief Controller of Explosives, Petroleum and Explosives Safety Organization, Oil Industry Safety

Directorate, State/Central Pollution Control Board and any other statutory clearances as applicable, which must be obtained by the Applicant before applying to the Highway Administration.

The application shall be put out in the public domain for 30 days for seeking claims and objections (on grounds of public inconvenience, safety and general public interest). The permission for laying utility services is to be normally granted within 30 days from the day of closure of public objections and claims. If no communication is received from the Highway Administration within 30 days from the day of closure of public objections and claims, the permission shall be deemed to be granted. The initial permission would be valid for a maximum of 5 years at a time, which can thereafter be considered for renewal. On payment of additional fee at the time of renewal, the permission shall automatically be renewed, unless defaults exist. In case of renewal, rate prevailing at the time of renewal shall be charged.

5. **Charges for granting licence for use of highway land:** For the purpose of license fee/lease rentals, the utilities have been divided into two categories; i) Public utilities and b) Industrial utilities as per the details given in **Annexure I**.

License Fee/lease rentals described below is for Industrial utilities. The license fee for Public utilities shall be 33% of the fee prescribed for Industrial utilities.

5.1 The following methodology shall be followed for license fees/lease rental determination for utility service lines other than localized infrastructure facilities like towers, repeaters and junction boxes).

License Fees (Rs/sq m/ month) = (Utilized NH land area X prevailing Circle Rate of land per unit area) / (10 x 12) where,

Utilized NH land area = Outer diameter/width of the concerned utility line X length

5.2 The following methodology shall be followed for license fees/lease rental determination for utility services such as towers/repeaters/ junction boxes etc.

License Fees (Rs/sq m/ month) = (Utilized NH land area X prevailing Circle Rate of land per unit area) / (10 x 12) where,

Utilized NH land area = Projection of utility on the ground including area of support system/tower

However, for public utilities, area below the support system/tower shall only be charged.

5.3 Fee shall have to be paid in advance for the period for which permission is granted. In case of renewal, rate prevailing at the time of renewal shall be charged. Delay in deposition of fee shall attract interest @ 15% per annum compounded annually.

5.4 A system to redress grievances and to consider relaxation from the guidelines, in exceptional cases, shall be notified separately and shall be effective from the date of notification.

6. All required restoration, maintenance work subsequent to laying of utility services shall be required to be undertaken by the Licensee at its cost either by itself or through its authorized representative in consultation with the Authority as per predetermined time schedule and quality standards. To process for the granting of permission and prior to signing of Lease agreement, a Performance Bank Guarantee for an amount based on per route metre with a validity of one year initially, in the prescribed format (extendable if required till satisfactory completion of work) shall have to be furnished by the utility service provider/ Licencee, as a security against improper restoration of ground in terms of

Manoj Kumar

filling/unsatisfactory compaction damages caused to other underground installations/utility services & interference, interruption, disruption or failure caused thereof to any services etc.;

Utility services such as pipes etc (rate in per m)	
provided in the ducts already provided	Rs 50
<= 300 mm dia/width	Rs 100
> 300 mm dia/width but < =1000 mm	Rs 250
> 1000 mm	Rs 500
Utility services such as towers etc (rate in Rs per sq m)	Rs 100

In case the Licensee fails to discharge the obligation of making good of the excavated trench/other restoration work, the Authority shall have a right to make good the damages caused by excavation, at the cost of the Licensee and recover the amount by forfeiture of the Bank Guarantee. In case, the Performance Bank Guarantee is invoked as mentioned above, the Licensee shall be required to replenish and reinstate the required Performance Bank Guarantee within one month of such invoking.

Notwithstanding this, the Licensee shall be liable to pay full compensation to the aggrieved Authority/ its designated agency for any damage sustained by them by reason of the exercise of the RoW facility.

7. The Authority shall enter into a License Agreement with the respective utility service provider in the format enclosed (**Appendix**) including any other conditions imposed by Highway Administration, to ensure safe and uninterrupted flow of traffic. Post signing of the agreement, the utility service provider shall be designated as 'Licensee' for the purpose of this project and will be authorized to install and operate utility services within the NH RoW. However, utility services shall be made operational by the Licensee only after a completion certificate to the effect is issued by the Highway Administration.

Encls: As above.

Manoj Kumar.

(Manoj Kumar)
Executive Engineer(NFSG) (S,R&T) (Roads)
For Director General (Road Development) & SS

Copy to:

1. All Technical Officers in the Ministry of Road Transport & Highways
2. All ROs and ELOs of the Ministry
3. The Secretary General, Indian Roads Congress
4. The Director, IAHE
5. Technical circular file of S&R (R) Section
6. NIC-for uploading on Ministry's website under "What's new"

Copy for kind information to:

7. PS to Hon'ble Minister (RTH&S)
8. PS to Hon'ble MOS (RTH&S)
9. Sr. PPS to Secretary (RT&H)
10. PPS to DG (RD) & SS
11. PPS to SS&FA
12. PS to ADG-I/ ADG-II
13. PS to JS (T)/ JS (H)/ JS (LA&C)/ JS (EIC)

****

Annexure I

Public Utility provider and Industrial infrastructure

A. Public Utility Provider

A **Public Utility Provider** in context of this Guideline shall mean any organization that provides and maintains the infrastructure for a public service like electricity, gas, water supply, telecom cables and sewage disposal subject to applicable regulation.

B. Eligible activities for Industrial Units or 'Industrial Infrastructure'

Industrial Infrastructure in context of this Guideline shall mean any physical infrastructure that is required to facilitate industrial operations and is constructed, operated and maintained along/across Right of Way of National Highways. Such infrastructure shall include the following:

a. Underground & above ground pipelines including provisions for booster pumping facilities, maintenance bays and other required support infrastructure for transport of legally permitted materials for industrial usage by a business entity having valid license for industrial operations.

b. Conveyor Belts including provisions for maintenance bays and other required support infrastructure for transport of legally permitted materials, by a business entity having valid license for industrial operations.

c. Power cables/wires etc. meant for industrial usage by a business entity having valid license for industrial operations.

d. Any other such associated industrial infrastructure facility.

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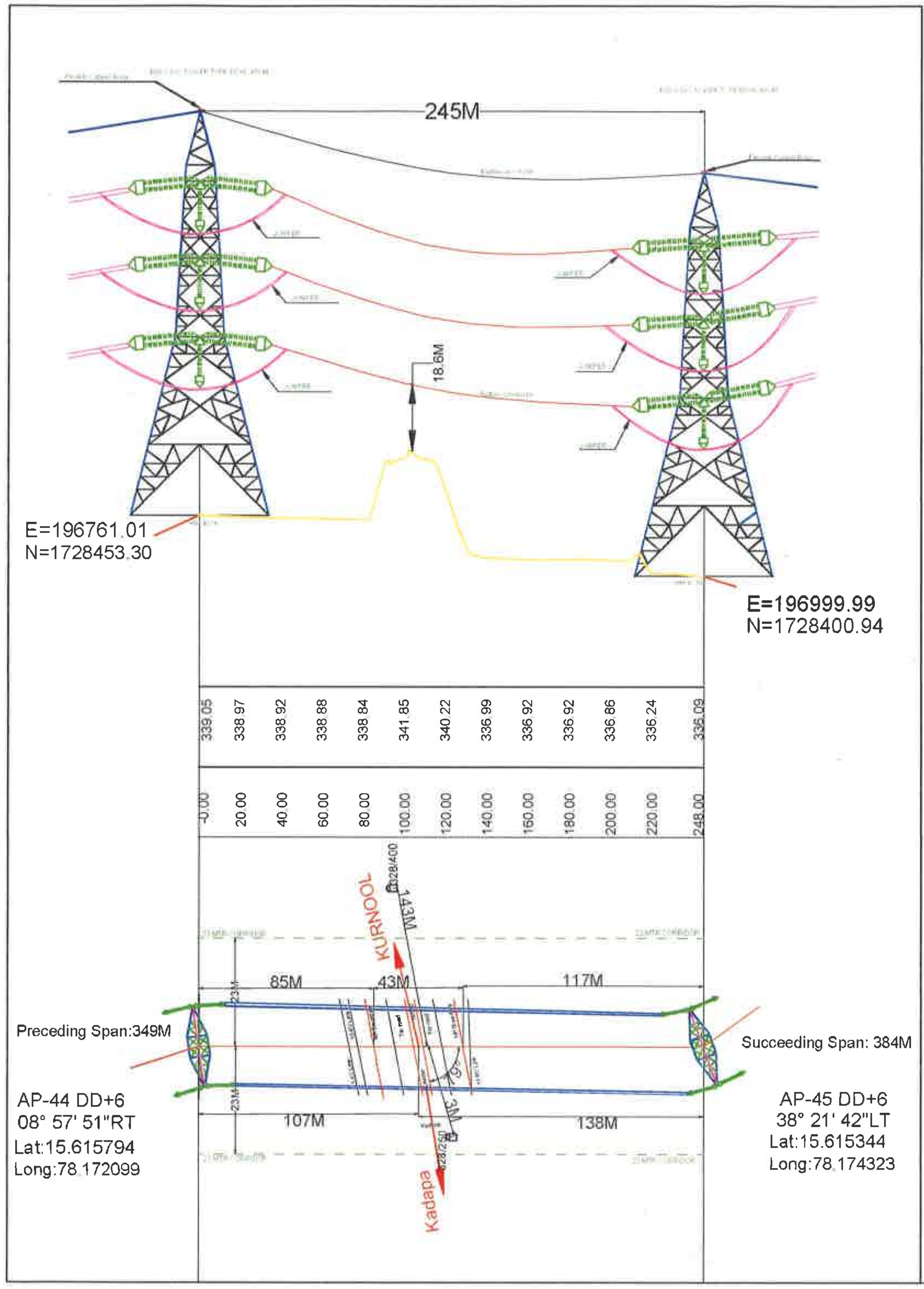
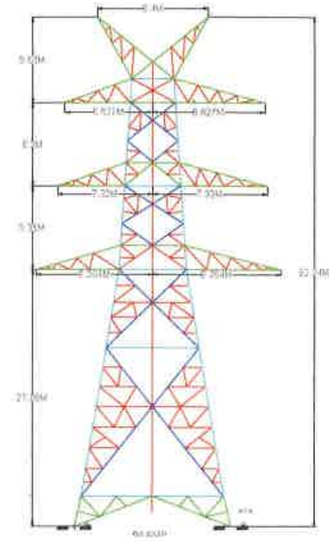
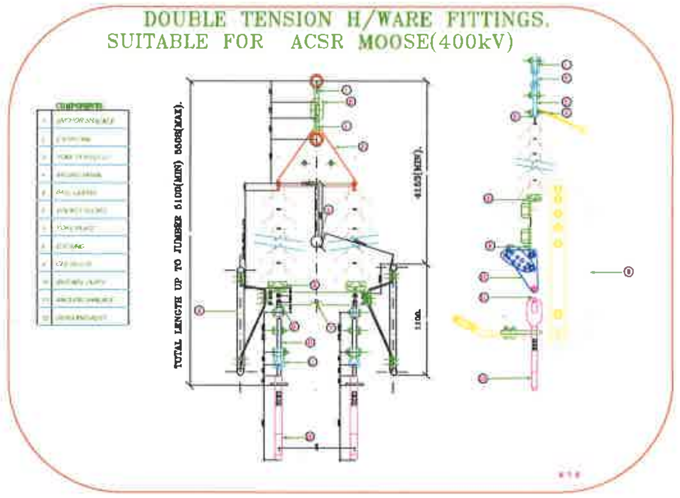
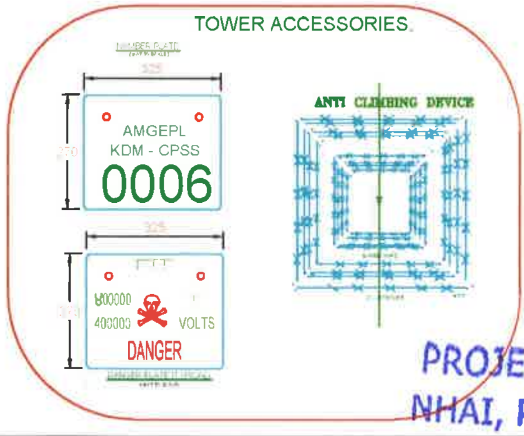
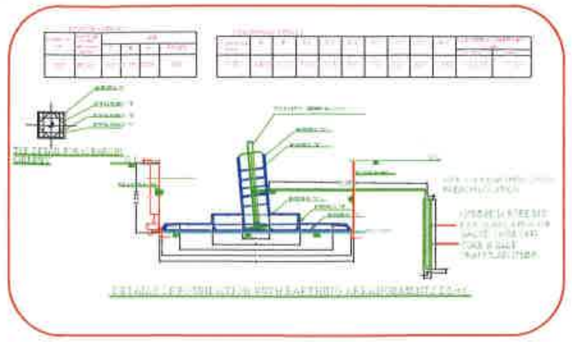










DETAILS OF OVER HEAD TRANSMISSION LINE AT NATIONAL HIGHWAY CROSSING

14M

EARTHWIRE PROPERTIES & INITIAL COMBINATION

CONDUCTOR PROPERTIES & INITIAL COMBINATION

CLIENT	ArcelorMittal A M GREEN ENERGY PRIVATE LIMITED
PROJECT	989 MW Wind - Solar Hybrid Project at Kurnool Dist, Andhra Pradesh
PROJECT DETAILS	400 KV Double Circuit Twin moose Transmission line from Kodumur PSS to Central Pooling Switching Station
OWNER'S ENGINEER	L & T - SARGENT & LUNDY LTD.
EPC CONTRACTOR	greenko GREENKO ENERGIES PROJECTS PVT. LTD
SUB CONTRACTOR	meil Megha Engineering &Infrastructures Limited

TITLE:
NATIONAL HIGHWAY 40 CROSSING PROPOSAL AT AP 44/0 - AP 45/0

SHT 01 OF 01 | REV 0

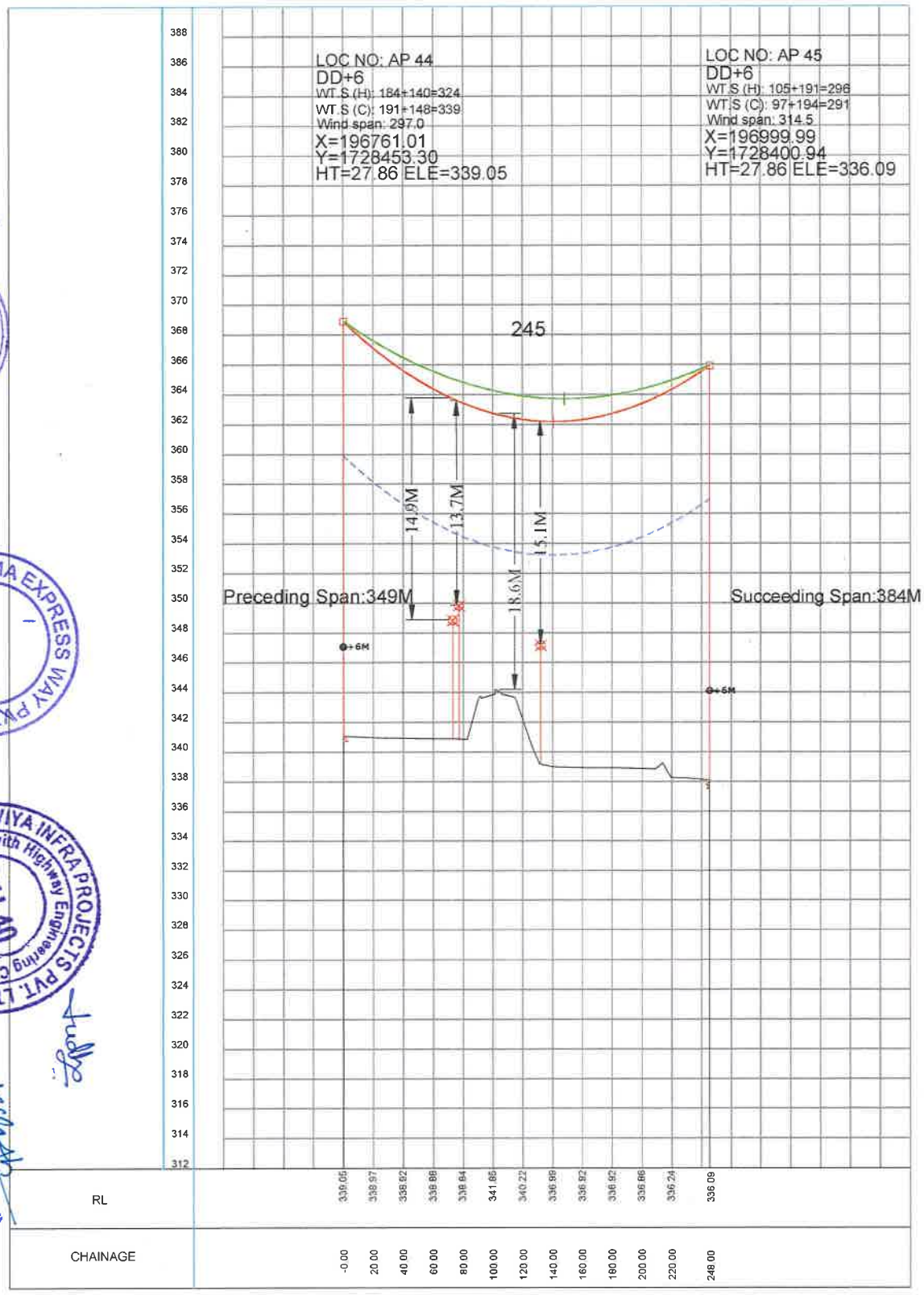
PROJECT DIRECTOR
NHAI, P.I.U. KADAPA.

Dy. Manager (T)
NHAI, P.I.U. KADAPA.

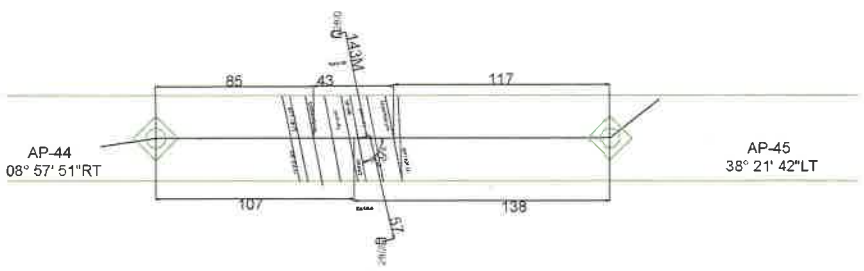
A M GREEN ENERGY PVT. LTD. HYDERABAD

RAYALASEEMA EXPRESS WAY PVT. LTD.

L.N. MALVIYA INFRA PROJECTS PVT. LTD. In Association with Highway Engineering Consultant NH-40 NANDYAL



CROSSING DETAILS



COLD CURVE	
HOT CURVE	
GROUND CLEARANCE CURVE	

Profile Drawing & Tower Spottings of 400 KV TMDC LINE	
Tower Spotting Data for 400kV TMDC LINE (Wind Zone-3 44m/s)	
1) CONDUCTOR NAME	ACSR MOOSE
2) CABLE DIAMETER	31 77mm
3) AREA	597 Sq mm
4) WEIGHT	2 004 Kg/m
5) MOD OF ELASTICITY	7034 Kg /Sqmm
6) CPEF. OFL EXPANSION	0.0000193/ C
7) WIND PRESSURE ON CONDUCTOR	139.92 Kg/Sqm
8) TEMP. RANGE(FULL WIND)	0° C - 53° - 85° C
9) NORMAL SPAN(RULING)	370 m
10) MAX. SAG AT 370 m (HOT)	11.597 m
11) GROUND CLEARANCE	8 84 m
12) SAG ERROR	0 15 m
13) TENSION AT 0° C	4226 99 Kg
14) TENSION AT 85° C	2956 86 Kg

Notes

1) ALL DIMENSIONS ARE IN M
2) ELECTRICAL CLEARANCE FOR RAILWAY CROSSING DETAILS -
   i) PRIOR APPROVAL OF RAILWAY AUTHORITY IS TO BE OBTAINED
   ii) MINIMUM CLEARANCE BETWEEN LOWEST POINT OF 400KV LINE CONDUCTOR AND RAIL LEVEL SHALL BE 20 26M HOWEVER APPROVAL OF RAILWAY CROSSING FROM RAILWAY AUTHORITY HAS TO BE OBTAINED IN EACH CASE
   iii) THE CROSSING SPAN SHALL BE LIMITED TO 300 M
   iv) THE CROSSING SHALL NORMALLY BE AT RIGHT ANGLE TO THE RAILWAY TRACK
   v) CROSSING SHOULD BE DONE WITH 'DD' TYPE TOWER
3) MINIMUM CLEARANCE FOR POWER LINE CROSSING
   i) FOR 132KV : 5490MM
   ii) FOR 220KV : 5490MM
   iii) FOR 400KV : 5490MM
   iv) FOR 765KV : 7940MM
   v) FOR 800KV : 9040MM
4) TELECOMMUNICATION LINE CROSSING -
   THE ANGLE OF CROSSING SHALL BE AS NEAR TO 90° AS POSSIBLE HOWEVER DEVIATION TO THE EXTENT OF 60° MAY BE PERMITTED UNDER EXCEPTIONALLY DIFFICULT SITUATIONS
5) THE NUMBER OF CONSECUTIVE SPANS BETWEEN THE SECTION POINTS SHALL NOT EXCEED 15 OR 5KM IN PLAIN TERRAIN, AND 10 SPANS OR 3KM IN HILLY TERRAIN A SECTION POINT SHALL COMPRISE OF TENSION POINT WITH DB/B TYPE OR DC/C TYPE OR DD/D TYPE TOWERS AS APPLICABLE
6) MINIMUM GROUND CLEARANCE REQUIRED 8 84M + SAG ERROR 0 15M=8 99M
7) FOR ALL NATIONAL HIGHWAY CROSSING, TENSION TOWER IS TO BE USED AND THE CROSSING SPAN IS NOT TO EXCEED 250METERS
8) WAY LEAVE CLEARANCE 23M EITHER SIDE FROM THE C L OF THE TOWER
9) MAXIMUM DEVIATION OF LINE FOR DEAD END TOWER SHALL BE 15° BOTH SIDE i.e. LINE SIDE AND SUBSTATION SIDE (SLACK SPAN SIDE)
10) HORIZONTAL SCALE 1CM = 20M
11) VERTICAL SCALE 1CM = 2M
12) UTM (ZONE - 44Q) COORDINATE SYSTEM HAS BEEN ADOPTED FOR DETAILED SURVEY

NH40 CROSSING PROPOSAL

Kurnool to Kadapa Between KM Stone Nos 28/0 & 28/2

CLIENT :	ArcelorMittal	A M GREEN ENERGY PRIVATE LIMITED	
PROJECT :	400KV DOUBLE CIRCUIT TWIN MOOSE TRANSMISSION LINE FROM 400 KV KODUMUR PSS TO CENTRAL POOLING SWITCHING STATION .		
OWNER'S ENGINEER:	L&T-S&L	L & T - SARGENT & LUNDY LTD.	
EPC CONTRACTOR:	greenko	GREENKO ENERGIES PROJECTS PVT. LTD	
SUB CONTRACTOR:	mell	Megha Engineering &Infrastructures Limited	
	DATE	NAME	TITLE:
DRAWN	25-09-2023	S B C	NH40 Crossing Profile from AP44 to AP45
CHECKED	25-09-2023	B S K	
APPROVED			
DEPARTMENT			
SCALE :	HORIZONTAL 1CM = 20M VERTICAL 1CM = 2M		
PROFILE LENGTH = 245 Meters		SHT: 01 OF 01	REV.0

A M GREEN ENERGY PVT. LTD. HYDERABAD

RAYALASEEMA EXPRESS WAY PVT. LTD

L.N. MALVIYA INFRA PROJECTS PVT. LTD. In association with Highway Engineering Consultant NAVAYAL NH-40

NHAI, P.I.U. KADAPA. Dy. Manager (T)

PROJECT DIRECTOR NHAI, P.I.U. KADAPA.